



Galvanizing Energy Transition: Solar (G.E.T. Solar) – Round 4

**Request for Proposal (RFP) from
Businesses Seeking Solar in Pennsylvania**

Commercial businesses located in Pennsylvania are invited to submit applications to go solar through Round Four of the G.E.T. Solar initiative. Selected organizations will receive a preliminary solar assessment, assistance selecting a qualified solar developer, and savings projections.

Financial tools are available to greatly reduce the cost of going solar. Businesses can take advantage of the 26% federal investment tax credit for solar and modified accelerated depreciation to recoup as much as half of the entire cost of their solar system in the first tax year. For agricultural organizations, or businesses located in rural areas, USDA REAP can provide additional savings from solar in just a few years. Organizations located in Allegheny, Bedford, Chester, Lawrence, Lebanon, Lehigh, Northampton, Philadelphia, and Wayne counties can take advantage of Commercial Property Assessed Clean Energy (C-PACE) programs offering low-interest, no-money-down loan financing with 20-year terms or longer that are paid through property tax bills and stay with the property, even if it sells. Businesses located outside of these counties are eligible to apply but will not have access to PACE loans until their counties approve C-PACE.

The Pennsylvania Solar Center is a project of our fiscal sponsor, The New Sun Rising (NSR), a 501(c)(3) non-profit organization. The mission of the PA Solar Center is to maximize the number of people, organizations, and businesses who benefit from solar energy in Pennsylvania. The *G.E.T. Solar* initiative is made possible through generous funding from The Hillman Foundation.

Date RFP Released	Thursday, January 14, 2021
Application Due Date	Monday, March 1, 2021 at 5:00 PM
Eligible Applicants	Commercial organizations located in Pennsylvania that own their building or property and are interested in going solar; see page 9 for more requirements.
Application Questions	Email questions to Leo Kowalski at leo@pasolarcenter.org

Table of Contents

- Overview of G.E.T. Solar for Businesses Initiative** 3
 - Program Summary 3
 - Goals 4
 - About G.E.T. Solar Team and Partners..... 4
- Solar Energy Financing** 5
 - Financing Overview..... 5
 - Commercial Property Assessed Clean Energy..... 5
- Timeline and Process** 7
 - Solar Installer Selection 8
- Eligibility** 8
- Application Requirements** 9
- Evaluation Process** 10
 - Key Criteria..... 10
 - Application Scoring 11
 - Final Proposal Designation..... 11
- Fees** 12
- Questions**..... 12
- Appendices** 13
 - Appendix 1 – Letter of Commitment Template 13
 - Appendix 2 – Questions Appearing on the Applicant Survey 14
 - Appendix 3 – Modified Accelerated Cost Recovery System 15
 - Appendix 4 – Commercial Property Assessed Clean Energy (C-PACE) – Additional Information..... 16

Overview of *G.E.T. Solar* for Businesses Initiative

Program Summary

The Pennsylvania Solar Center team started the Center because we know firsthand the excitement and desire of people all across the country and the state to go solar for many different reasons, including concern for the environment and seeking more stable, predictable and lower energy prices. We also understand that once that decision to explore solar is made, the steps to get the equipment installed are sometimes difficult and cumbersome and not knowing who to trust along the way makes the process even more challenging.

The Pennsylvania Solar Center through grants from the Hillman Foundation, Heinz Endowments, and our supporters, will address these and other obstacles for organizations by assisting them to go solar through the second round of our *G.E.T. Solar* Initiative. The *G.E.T. Solar* initiative is a streamlined process that will inspire members and staff to go solar. We will infuse confidence in the process with the use of trusted tools and resources that connect organizations to qualified professionals to make the process of going solar straightforward.

For Round Four of *G.E.T. Solar*, the PA Solar Center invites commercial organizations to complete a prequalifying survey to assess their potential benefit from and obstacles to installing a solar PV system. Qualifying organizations will be encouraged to submit applications through the PA Solar Center website to participate in the *G.E.T. Solar* program. Selected organizations will receive technical assistance and a menu of financing options that will include the cost of a full, outright purchase of the solar system as well as low-interest loan programs and financing mechanisms such as Power Purchase Agreements or C-PACE funding. Each scenario will include the projected savings and costs to the organization. The PA Solar Center will assist organizations in issuing an RFP to select a qualified PA-based solar contractor to install the solar project.

The *G.E.T. Solar* team hopes to select at least ten (10) projects to receive technical assistance to install solar over a six-month process with the goal of installation to occur before December 31, 2021.

G.E.T. Solar is Straightforward and Simple

- 1.) Complete a short pre-screening survey to determine if your organization qualifies for a solar PV system.**
- 2.) Complete the application requirements:**
 - Submit a commitment letter from your company leadership
 - Provide your last month's electric bill
 - Download the PDF application at www.pasolarcenter.org/get-solar
 - Provide a letter from your municipality (preferred but not required)
 - Pay \$75 application fee to help cover some of our costs
- 3.) Assign an internal Solar Committee to work with our *G.E.T. Solar* team.**
- 4.) Review with our team potential financing options and qualified solar contractors.**
- 5.) Sit back and watch your solar system be installed.**

Goals

The goals of the *G.E.T. Solar* initiative are to:

- 1) Install 1,000 kilowatts (kW_{dc} or 1 megawatt) or more of solar generating capacity on *at least* ten (10) solar projects ranging in size.
- 2) Provide opportunities for commercial organizations to acquire solar that minimizes upfront capital and/or maximizes total return on investment and to secure a long-term, stable electricity price below current grid prices.
- 3) Demonstrate that providing trusted resources, streamlined technical assistance, and pre-identified financing decreases solar decision-making time and increases confidence for customers to go solar.
- 4) Increase the amount of clean, solar energy on the Pennsylvania electric grid.
- 5) Decrease the use of carbon-intensive, air-polluting fuels in Pennsylvania that are attributing to climate change, air pollution and to health and environmental impacts in our communities.
- 6) Increase economic development in Pennsylvania by supporting solar businesses and resources located within the Commonwealth that will increase job opportunities.

About *G.E.T. Solar* Team and Partners

Pennsylvania Solar Center, Pittsburgh, PA – The PA Solar Center is a statewide project that provides a centralized hub of resources and information for anyone who is seeking to power their home, business, house of worship or community organization with clean solar power. The PA Solar Center offers technical assistance to tax-exempt organizations and to businesses to go solar by connecting them with trusted professionals and financing. The PA Solar Center will also work to organize solar supporters and empower them to reach out to decision makers to support robust solar policies on the state, regional and local levels. The New Sun Rising is a 501(c)(3) non-profit organization that is the fiscal sponsor for the PA Solar Center and the project is managed by Hot Earth Collaborative LLC, the founder of the PA Solar Center and a clean energy consultancy based in Pittsburgh, PA. The PA Solar Center can be found online at www.pasolarcenter.org.

New Sun Rising, Millvale, PA – New Sun Rising (NSR) is the fiscal sponsor for the Pennsylvania Solar Center. NSR builds vibrant communities by increasing the capacity of organizations which strengthen culture, promote sustainability, and build opportunity. As a nonprofit 501(c)(3) charitable organization, NSR supports leaders to enhance their impact through planning, connectivity, and resources for neighborhood-scale innovation. Their focus is on underserved communities and how regenerative growth strategies can be utilized for equitable development. www.newsunrising.org

Hillman Foundation and the Heinz Endowments, Pittsburgh, PA – The PA Solar Center is grateful for the generous support from these great foundations.

Solar Energy Financing

Financing Overview

The *G.E.T. Solar* Initiative will educate selected applicants about various financing options that may benefit their organization.

Businesses in Pennsylvania have creative financial tools available to help finance their solar that could in some instances reduce the overall cost to go solar by 75% or provide low-impact financing options to defer up-front costs. In some instances, organizations will be able to have their solar installed with no up-front costs while maintaining electricity cost savings as early as year one. Some of the more common financial tools available are:

- 1) The **26% Federal Investment Tax Credit (ITC)** is available until December 31, 2022 and will step down to 22% on January 1, 2023.
- 2) **Modified Accelerated Cost Recovery System (MACRS)**, an IRS tax deduction which allows 100% depreciation in year one, federally, and full depreciation on state taxes over a 5-year schedule, resulting in another 25% or more of cost recovery for the entire solar installation (businesses should consult with their tax professionals).
- 3) **C-PACE Financing** that allows pay-back of an energy loan on the property's tax bill over the long-term. C-PACE loans stay with the property and do not affect the owner's line of credit.
- 4) **USDA REAP [Grants and Loans](#) for agricultural producers and small businesses located in [targeted rural areas](#)**, including loan guarantees on loans up to 75% of total eligible project costs, grants for up to 25% of total eligible project costs or a combined grant and loan guarantee funding up to 75% of total eligible project costs.

Commercial Property Assessed Clean Energy

Organizations can take advantage of **Commercial Property Assessed Clean Energy (C-PACE) loans**, which are voluntary assessments attached to property assessment programs designed to help streamline the process of making capital improvements for energy efficiency upgrades and clean energy infrastructure.

C-PACE financing is only available in counties or municipalities that have adopted the program and have selected a program administrator. Currently, C-PACE has been adopted in Allegheny, Bedford, Chester, Lawrence, Lebanon, Lehigh, Northampton, Philadelphia and Wayne counties (see <http://pennsylvaniacpace.org/> for more information).

The benefits of utilizing C-PACE financing for solar include:

NO DOWN PAYMENT	The entirety of the solar installation, including “soft” costs, is capitalized under one loan repayment schedule with no upfront investment required.
PRESERVES LINES OF CREDIT	As C-PACE financing works through tax assessment, it has no impact on an organization’s credit availability. The loan stays with the property if it is sold.
FIXED RATE AND REPAYMENT SCHEDULE	Occurring as a special tax assessment means C-PACE financing is quite secure, proving an opportunity for competitive, fixed rates over the repayment term.
LONG-TERM FINANCING	C-PACE loans can be structured over the useful life of the improvement. Solar modules come with 20 to 25-year warranties, providing the opportunity for longer term repayment options through C-PACE.
CASH FLOW POSITIVE	Federal tax credits are compatible with C-PACE financing. Because there is no down payment through C-PACE, businesses receiving the federal ITC credit and MACRS depreciation receive these benefits as short-term income that can be leveraged at the organization’s discretion.
IMMEDIATE IMPACT ON ELECTRICITY BILL	C-PACE is a no-upfront cost option that also returns 100% of the solar benefit directly to the organization in year one.

Find more information about C-PACE in Appendix 4.

Timeline and Process

Thursday, January 14, 2021	Launch <i>G.E.T. Solar</i> Round Four application process. The PA Solar Center will prescreen your project, if you desire, to indicate if you might consider filing a full application. Prequalification survey available at www.pasolarcenter.org/get-solar .
Wednesday, February 10, 2021 at 1:00 pm	<i>G.E.T. Solar</i> team hosts video conference info session to discuss the program and answer questions (will be taped for future viewing). Round Four Introduction Webinar
Wednesday, February 17, 2021 at 1:00 pm	<i>G.E.T. Solar</i> team hosts video conference info session to discuss solar financing with experts, covering topics from tax benefits to C-PACE financing and answering questions. Round Four Finance Webinar
Monday, February 22, 2021 at 5:00 pm	The deadline to receive a pre-screening is February 22. Provide us with a small amount of information and we will provide recommendations about moving forward with a full application. that date, we will not be available for a pre-screening, but organizations can still submit full applications (see appendix 2 for the pre-screening survey questions).
Monday, March 1, 2021 at 5:00 pm	Applications are due at 5:00 pm. Download a PDF application form at www.pasolarcenter.org/get-solar . Submit application and additional materials to getsolar.pa@gmail.com
Wednesday, March 3, 2021	Tax-deductible application fee of \$75.00 due at Pennsylvania Solar Center (see instructions). First phase selections determined by <i>G.E.T. Solar</i> team and selected projects move to next round. All participants will be notified via email.
Week of Monday, March 8 through Friday, March 12, 2021	<i>G.E.T. Solar</i> team completes a preliminary feasibility analysis, solar production and cost estimates, provides feedback to organization. <i>G.E.T. Solar</i> team will host group call with selected applicants to discuss program goals, next steps, and to answer questions.
Friday, March 19, 2021	Selected applicants provide structural and electrical documentation in digital format for developer review.
Monday, March 22, 2021	<i>G.E.T. Solar</i> team and applying organization issue an RFP to select a qualified solar contractor for final design & construction of the project.
Friday, April 23, 2021	Project proposals are due from solar contractors.
Monday, April 26, 2021	<i>G.E.T. Solar</i> Team helps organization review proposals from solar contractors and review options for financing projects. Timelines to bring each project to contract and construction will vary by organization.

Solar Installer Selection

The *G.E.T. Solar* team will assist each selected organization in issuing a Request for Proposal (RFP) to choose the solar installation developer for their project. Businesses may wish to issue their own RFP, but we are available to assist. The *G.E.T. Solar* team will provide organizations assistance evaluating solar developers and proposals by using an apples-to-apples comparison method to compare all relevant information provided in the proposals. Recommendations of solar developers will be made on the following criteria:

- NABCEP certification – at least one member of the solar development company will have a current certification from the North American Board of Certified Energy Providers ([NABCEP](#));
- Relevant experience of the solar developer and its staff to install commercial-scale solar systems;
- Overall quality and value of the proposed services and equipment;
- Pricing proposal offers good value and is based on reasonable assumptions;
- References – The *G.E.T. Solar* team will collect at least three references for commercial scale projects completed by the solar developer;
- Geographic location of the solar developer’s staff and offices; developers located in near the proposed sites will be given selection preference and other Pennsylvania-based developers will be given preference over out-of-state contractors.

Eligibility

The *G.E.T. Solar* Team will consider commercial organizations located in Pennsylvania, if they meet the following criteria:

- The business owns their building or the property/land where the solar will be installed;
- If the solar is intended for the property’s roof, the roof is less than 10 years old or the organization is currently renovating its roof. Roofing will need to be completed before solar is installed;
 - If the roof requires upgrades or replacement, organizations eligible for C-PACE financing may choose to bundle these costs with the solar installation as one project proposal (see page 5 for more information). Some roof replacements also qualify as energy property when combined with certain types of solar and roof systems and may be eligible for tax benefits.
- If the solar is intended to be a ground-mounted system, the property/land is suitable for development (e.g., it is located on relatively flat, stable ground that is clear of obstacles and shading; the property is not located in a floodplain and there is access to an electric meter or distribution lines nearby. Essentially, the property is “shovel-ready” to build solar);
- The organization has reserve funds available to purchase a solar system OR organization is amenable to acquiring solar through a commercial loan, C-PACE financing or other financing;
- Designate an internal Solar Committee comprised of at least two or more representatives who have decision-making capabilities in the business — e.g. owner, general manager,

CEO, CFO, etc.—and who will be able to serve as a point of contact to the *G.E.T. Solar* Team;

- Complete all application requirements by the dates indicated below under Application Requirements.
- **PREFERRED** – Organization is located in one of the preferred C-PACE counties: Allegheny, Bedford, Chester, Lehigh, Lawrence, Lebanon, Philadelphia, Northampton, and Wayne. [We will consider organizations in other counties as well or who are not using C-PACE funding]

Because the *G.E.T. Solar* timeline is rather succinct, we are seeking organizations that are nimble in their decision-making capabilities and can abide by the timeline outlined in this RFP document.

Application Requirements

Organizations are encouraged to complete a brief pre-screening survey online at www.pasolarcenter.org/get-solar. The survey will help our team and yours gauge your organization's basic qualification to participate in the program and host a solar PV system on site. We will provide feedback about moving forward with a full application. The **deadline to receive a pre-screening is Friday, July 17**. After that date, we will not be available for a pre-screening, but organizations can still submit full applications (see appendix 2 for survey questions).

To apply to G.E.T. Solar: Round 4, the organization must submit the following by **Monday, March 1, 2021 at 5:00 pm**:

1. **Completed G.E.T. Solar Application**, which can be downloaded as a PDF from www.pasolarcenter.org/get-solar. To enter data into the application fields, you must use the Fill and Sign feature in Adobe Acrobat ([Go Here](#) to quickly learn how to use Fill and Sign) OR use DocHub to fill in the form online (This requires you to have a free Gmail or DocHub account).
2. **Recent electricity bill (in PDF format) showing electricity usage for the past 12 months** as well as costs for distribution, transmission and generation of electricity, demand charges and other fees for each building involved in the project.
[Please name PDF file as: NAME OF ORGANIZATION_Electric Bill_DATE]
3. **Letter from the municipality** where the organizational property is located stating that the proposed solar site or building is located in a zoning district that would permit a solar energy project. **This is a preferred request**, but if the organization does not have time to acquire the letter, it should not prevent submission of the application.
[Please name PDF file as: NAME OF ORGANIZATION_MUNI LETTER_DATE]

The **Application Fee of \$75** is due by Wednesday, March 8, 2021. Checks can be made payable to The New Sun Rising (with *Pennsylvania Solar Center* in the memo) and by mail to: PA Solar Center, 1435 Bedford Avenue, Suite 140, Pittsburgh, PA 15219 or pay online at New Sun Rising project portal at: <https://www.newsunrising.org/project/pennsylvania-solar-center/>

(click on donation and pay via credit card). The PA Solar Center is a project of our fiscal sponsor, The New Sun Rising, a 501c3 non-profit organization. This fee is tax-deductible according to IRS rules and helps us to provide you with services to go solar.

Evaluation Process

The *G.E.T. Solar* team will evaluate applications based on the following key criteria and will score each project as described below.

Key Criteria (bulleted items describe the element of the key criteria that will be evaluated):

Leadership and Community Commitment

- Demonstration of commitment by business to the project as evident by assignment of key staff and decision makers to their Solar Committee.
- Support letters from municipality indicating awareness of the potential project and that their zoning and permitting practices will permit solar energy in the zoning district of the proposed project (preferred requirement).

Community Benefit

- The quality and/or contribution of the business's mission and services as well as their impact and benefit to the community, their employees and clients that they serve.

Commitment to Renewable Energy and Energy Efficiency

- The organization's plans to demonstrate to employees, community members, clients, etc. that the building/property has solar (for example, displays about the solar system posted in prominent space in the building, computer monitor in the lobby that shows daily energy projections, signs in the front lawn indicating solar is onsite, and/or description on the website, etc.).
- Stated intention of leveraging the installed solar system to educate employees, clients, other business leaders, etc. about the opportunities and benefits of solar energy and energy efficiency.
- Past and current sustainability initiatives that demonstrate ongoing commitment and leadership to clean energy and sustainability in the community.

Physical Properties of the Project

- The potential of the project to maximize solar generation, taking into account orientation of the building and/or roof to maximize efficiency of the solar panels (e.g., the building or roof is situated so that solar panels can be positioned to face south or near south)
- Lack of obstruction and/or shading on the site
- The amount of usable space available for solar installation
- Roof age and condition of roof [the business may consider replacement through reserve funds or C-PACE financing), any engineering or structural changes required OR land condition for ground-mounted solar systems

- Need to upgrade electrical service or other physical structures on the site or run electrical lines underground for ground-mounted systems
- The visibility of the proposed solar system to the outside public space (e.g., from the street or sidewalk) would be of particular interest to the *G.E.T. Solar* team
- Unique safety precautions that will need to be considered for installation such as very steep roofs, difficulty accessing roof, etc.

Financial Qualities of the Project

- The potential size of the solar system (the size impacts that cost of the system; the larger the system, the greater the economies of scale and more attractive to investors if using a Power Purchase Agreement. However, *G.E.T. Solar* is not just seeking the largest systems; other qualities of the project are equally important).
- The current cost of electricity being paid by the client (organizations paying higher electricity costs will benefit the most from solar with greater savings).

Application Scoring

Each application will be evaluated against the Key Criteria listed above using this valuation system: Low = 1 point, Medium = 2 points, and High = 3 points. Total scores will be used to rank the applications.

The scoring results will only be available to the *G.E.T. Solar* Team and will not be revealed publicly nor will they be shared with the applicant. Regardless, each applicant will be provided detailed feedback about their application.

The actual number of projects chosen will be determined by the *G.E.T. Solar* team and will likely depend upon the number and quality of applications received. **The team will attempt to select as many viable projects as possible and will use the ranking system to choose the highest scoring applications only if necessary.**

Final Proposal Designation

All applicants will receive a definitive response from the *G.E.T. Solar* team **by Wednesday, March 3, 2021**. The designation will be noted as one of the following:

- 1) Application Selected. The organization was selected to receive technical assistance as part of Pennsylvania Solar Center's *G.E.T. Solar Initiative*, Round Four.
- 2) Invitation for custom technical assistance. The applicant's project has unique circumstances that require technical assistance outside the scope of the *G.E.T. Solar* project, but the project team sees value and offers additional assistance.
- 3) Invitation to receive future technical assistance. The project did not qualify for assistance during this round of assistance or needs to be waitlisted. The applicant is invited to be included in a future round of assistance.
- 4) Application declined. The application did not meet the requirements for project assistance or was not suitable for solar or to receive assistance from the Pennsylvania Solar Center. A reason for declining inclusion will be provided.

Fees

The PA Solar Center requires an application fee of \$75.00 from businesses submitting a formal application by Monday, March 1, 2021. **If an organization is selected into the program and their solar project is contracted* the Solar Center will require an assistance fee of either a donation of 10% of the solar renewable energy credits (SRECs) generated annually by the installed array or a one-time fee of \$0.01 per installed watt_{dc} (\$10.00/kilowatt_{dc}).**

Our research shows that that customer acquisition costs for solar developers range from \$37/kilowatt_{dc} to \$50/kilowatt_{dc}. The Solar Center is essentially providing “shovel-ready” projects to developers so we are saving them money and time educating the client. Our fee for service is very reasonable. This assistance fee will allow the Solar Center to continue to provide vital support for organizations and businesses seeking solar for many years to come, while reducing overall costs to solar developers and customers.

It's important to note that the Solar Center's assistance fee can be bundled into developer's fees, including loans provided through C-PACE financing under the one umbrella repayment schedule.

**A project is considered contracted when a signed agreement is reached between the applying organization, the selected solar developer, and the financing entity, if applicable. The assistance fee should be included in the contract between the organization and the solar developer.*

Questions

All questions should be directed to Leo Kowalski, Consulting Program Manager of the Pennsylvania Solar Center at leo@pasolarcenter.org (preferred communication) or if necessary, via phone at 412-742-0019. Please include “GET SOLAR: Question” in the subject line of the email.

Appendices

Appendix 1 – Letter of Commitment Template

[LETTER SHOULD BE ON ORGANIZATIONAL LETTERHEAD AND NO MORE THAN 2 PAGES IN LENGTH]

[INSERT DATE]

Pennsylvania Solar Center
c/o Energy Innovation Center
1435 Bedford Avenue, Suite 140
Pittsburgh, PA 15219

RE: G.E.T. Solar Application for [NAME OF ORGANIZATION]

Dear G.E.T. Solar Team:

On behalf of the board and staff of [NAME OF Business], we are pleased to submit our application for Round Four of the G.E.T. Solar Initiative.

[Include brief statement explaining the organization’s mission and work and how it benefits its clients that it serves and the local community where it is located.]

[NAME OF BUSINESS] is interested in going solar, because [add brief explanation about why the business is interested in going solar].

If we are chosen to be a part of the G.E.T. Solar initiative and install a solar system on our property, we intend to [describe what the organization will do to show their client, employees, other businesses, and community about the existence of the solar array on their property and the plan to use the solar array for educational purposes to further encourage the use of solar energy]

We have selected the following people to serve on our Solar Committee as liaisons between our organization and the G.E.T. Solar Team [list all members of your committee, two are required]:

- List Name, phone number, and email
- List Name, phone number, and email
- List Name, phone number, and email

We, the undersigned agree to abide by all the requirements and timelines specified in the G.E.T. Solar Initiative RFP document.

Sincerely,

- 1) A lead staff member of the organization (President, CEO, CFO, general manager, etc.)

Appendix 2 – Questions Appearing on the Applicant Survey

These questions will be included on the online pre-screening form at www.pasolarcenter.org/get-solar; they are provided so that you can prepare them in advance of answering the survey online:

- Name of Organization
- Primary Contact Name and Title, Telephone Number, Email Address
- Address of all properties to install solar: Street Address, City, State Zip code, Name of Municipality
- If you intend to install solar on your organization's roof:
 - How old is your roof (if known, when was it installed or last reroofed or replaced?)

Appendix 3 – Modified Accelerated Cost Recovery System

Tax depreciation of solar panels is an incredibly potent tool for businesses to increase the value of solar energy. Solar-owning businesses can depreciate the value of their solar installation even though it will continue to produce electricity at a high rate for up to 25 years.

Modified accelerated cost recovery system (MACRS) allows businesses to recover the cost of tangible assets over a shorter time period. The depreciation value—the amount of money recovered—is equal to the organization’s tax rate, determined by their federal tax bracket, on 100% of the installation’s original value. Thanks to the [Tax Cuts and Jobs Act of 2017](#), solar-owning businesses can claim **100% of the depreciation value in year one on their federal taxes**. In addition to the federal depreciation schedule, a state depreciation recovery is available over a five-year schedule.

The exact depreciation value that can be claimed is determined by your state and federal tax brackets respectively. Applicants should consult with their tax professionals to understand the benefits available.

Is MACRS Compatible with the 26% Federal Investment Tax Credit (ITC)?

Yes, depreciation can be used in conjunction with the ITC. The IRS reduces the value of the original system when determining depreciation by one-half of the ITC, meaning **when a business is claiming the ITC it will receive depreciation on 87% of the original system value**.

Below is a basic example of the cost recovery a Pennsylvania business can expect on a solar installation from their federal taxes utilizing MACRS and ITC, assuming an original installation value of \$100,000, a federal tax rate of 25% and a state tax rate of 7%:

Federal and State Cost Recovery for a \$100,000 Solar Installation	Formula	Cost Recovered
Federal tax credit (ITC)	26% of \$100,000	\$26,000
<i>Now, to calculate federal and state depreciation we deduct one half (or 13%) of the ITC from the installation’s value, which would be \$100,000 - \$13,000 = \$87,000</i>		
Federal MACRS depreciation after one year (federal tax rate which is 25% in example multiply by amount in previous line)	25% of \$87,000	\$21,750
State MACRS depreciation after the first year of the five year schedule (after five years)	7% of \$87,000	\$1,218 (\$6,090)
Total cost recovered after the first year (after five years)		\$48,968 (\$53,840)

Appendix 4 – Commercial Property Assessed Clean Energy (C-PACE) – Additional Information

Commercial Property Assessed Clean Energy Program, or C-PACE, launched in Pennsylvania in 2018 to provide “business property owners access to low-interest, long-term loans for clean energy and clean water projects that are repaid as property tax to benefit the community,” as the Department of Environmental Protection [describes](#). C-PACE clears many of the hurdles usually impeding organizations from making these types of significant upgrades:

- Voluntary tax assessments stay with the property, not the owner, providing for longer term lending options and a reasonable fixed rate (usually between six and nine percent interest).
- Loans can be structured around the useful life of the improvements, which is great for solar systems that are usually warranted for up to 25 years.
- Multiple improvements can be bundled under a single loan. Should an organization want to upgrade their lighting system, **replace their roof**, and **install solar**, it can do so with a single C-PACE project and thus a single loan and repayment schedule.
- C-PACE loans have **no up-front costs** to the organization, which includes design and consultation fees that can be rolled into the principle loan.

The Sustainable Energy Fund has a [website providing general information about C-PACE financing specific to Pennsylvania](#) including the helpful guide below:

HOW C-PACE WORKS



Where is C-PACE available?

In Pennsylvania individual counties or municipalities are able to pass an ordinance to declare an energy and water improvement district, otherwise known as a C-PACE district. The county or municipality selects a program administrator for their C-PACE program. The program administrator then curates a roster of qualified private lenders with whom they connect prospective projects. C-PACE has been adopted in the following eight counties:

County	Program Admin.	County	Program Admin.
Allegheny	Sustainable Energy Fund (SEF)	Lehigh	Sustainable Energy Fund (SEF)
Bedford	Sustainable Energy Fund (SEF)	Northampton	Sustainable Energy Fund (SEF)
Chester	Sustainable Energy Fund (SEF)	Philadelphia	Philadelphia Energy Authority
Lawrence	Sustainable Energy Fund (SEF)	Wayne	Sustainable Energy Fund (SEF)
Lebanon	Sustainable Energy Fund (SEF)		

As C-PACE is new to Pennsylvania, there is not an exhaustive list of C-PACE lenders available to peruse. The PA Solar Center will work with applicants and partner organizations to identify qualified financiers. Though C-PACE is brand new to Pennsylvania, it has been successfully implemented across the country, including our next-door neighbor, Ohio, which as of 2019 has enjoyed more successfully completed C-PACE projects than any state besides California. Let's keep *pace* with Ohio!

[Join our video conference to learn more about C-PACE](#)

The PA Solar Center will be hosting a video conference in early March for prospective applicants of the *G.E.T.* Solar initiative to speak with a C-PACE expert to ask questions and help determine project eligibility. Registration and more information will be posted soon on our website at www.pasolarcenter.org/get-solar, but please feel free to contact our Program Manager, Leo Kowalski (leo@pasolarcenter.org) in advance.

More information about C-PACE can also be found at the website of the [PA Department of Environmental Protection](#), the [Sustainable Energy Fund](#), the [Philadelphia Energy Authority](#), or at www.pensylvaniaCPACE.org.