



## CDFA-Bricker PACE Webinar Series: Focusing on Sustainability Using PACE

# Welcome

The Broadcast will begin at 11:00 AM (Eastern)

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# CDFA-Bricker PACE Webinar Series: Focusing on Sustainability Using PACE

## CDFA Administrator

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### **Pearl-Jean Mabe**

Director of Research and Technical Assistance  
Council of Development Finance Agencies

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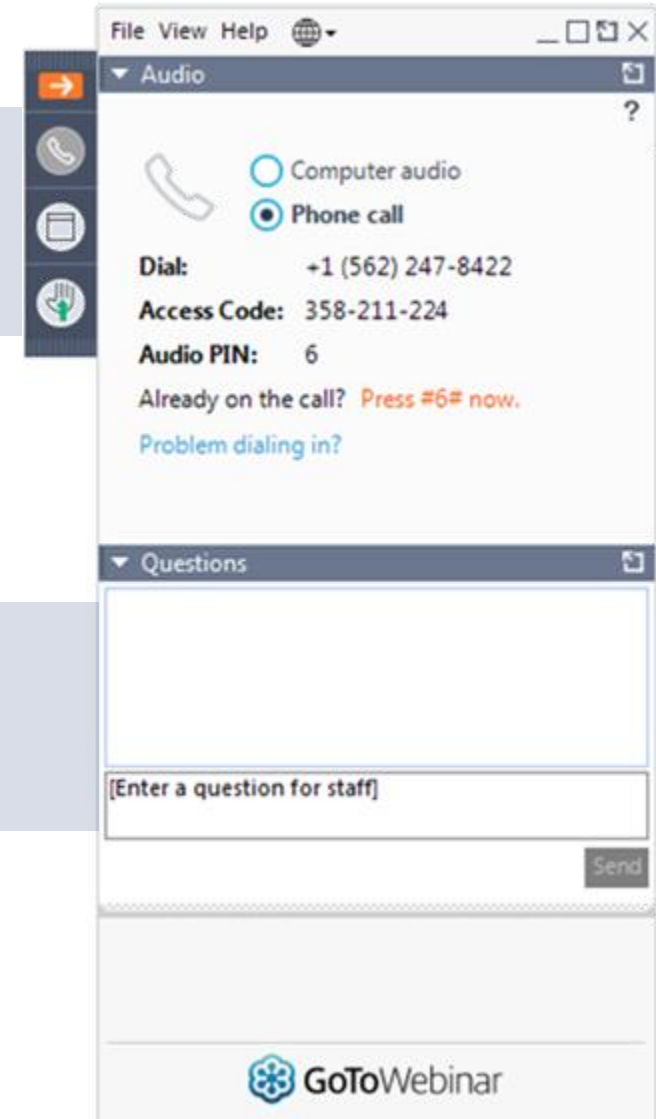
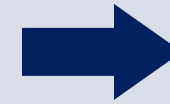


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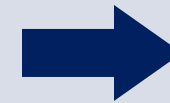


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Using your telephone will give you better audio quality.



Submit your questions to the panelists here.



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# CDFA-Bricker PACE Webinar Series: Focusing on Sustainability Using PACE

## Moderator



### **Brooke Mangiarelli**

Associate  
Bricker & Eckler, LLP

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# CDFA-Bricker PACE Webinar Series: Focusing on Sustainability Using PACE

## More About This Series

### CDFA-Bricker PACE Webinar Series:

#### **PACE 101: The Basics of PACE Financing**

May 12, 2020

#### **PACE Program Efficiency: Managing an Effective PACE Program**

June 9, 2020

#### **Focusing on Sustainability Using PACE**

July 14, 2020

#### **Policy and the Future of PACE**

August 25, 2020

#### **PACE Program Capitalization**

September 22, 2020

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# CDFA-Bricker PACE Webinar Series: Focusing on Sustainability Using PACE

## Panelists



**Eric Alini**

Managing Partner  
Counterpointe Real Estate Solutions



**Ben Kessler**

Mayor  
City of Bexley, Ohio



**Maryrose Myrtetus**

C-PACE Program Manager  
Philadelphia Energy Authority



**Steve Melink**

CEO  
Melink Corporation

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# Keeping PACE with Sustainability

Focusing on Sustainability Using PACE

**Brooke A. Mangiarelli**

*Associate Attorney*

Bricker & Eckler LLP



**Bricker & Eckler**  
ATTORNEYS AT LAW

## Property Assessed Clean Energy Financing

- Innovative tool for sustainable development
- A tax-assessment based financing mechanism for energy efficiency, renewable energy, and water conservation projects
- 100% voluntary
- Long-term, fixed rate financing
- PACE assessments transfer to the next owner upon sale of property
- Can be used in conjunction with other project finance tools, including TIF, HTC, bonds, and opportunity zones

# Special Assessments, Generally

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- Traditionally used to finance public improvements
- **1736** – First Assessment District in Philadelphia
- **2020** – 37,000 Assessment Districts nationwide
- Governmental charges (not taxes)
- Imposed on real property near an improvement to pay costs of the improvement
- Imposed in recognition of the “special benefit” received
- Collected with and in the same manner as real property taxes



# PACE Assessments

- Fund private improvements
- State PACE laws conclude that private energy conservation is a “public good.”
- Energy efficiency improvements
  - ✓ HVAC
  - ✓ Lighting
  - ✓ Roofs, windows, insulation, elevators
- Alternative energy improvements
  - ✓ Solar photovoltaic (PV) and thermal
  - ✓ Wind
  - ✓ Geothermal
  - ✓ Biomass
- Water efficiency improvements



# PACE Process Overview

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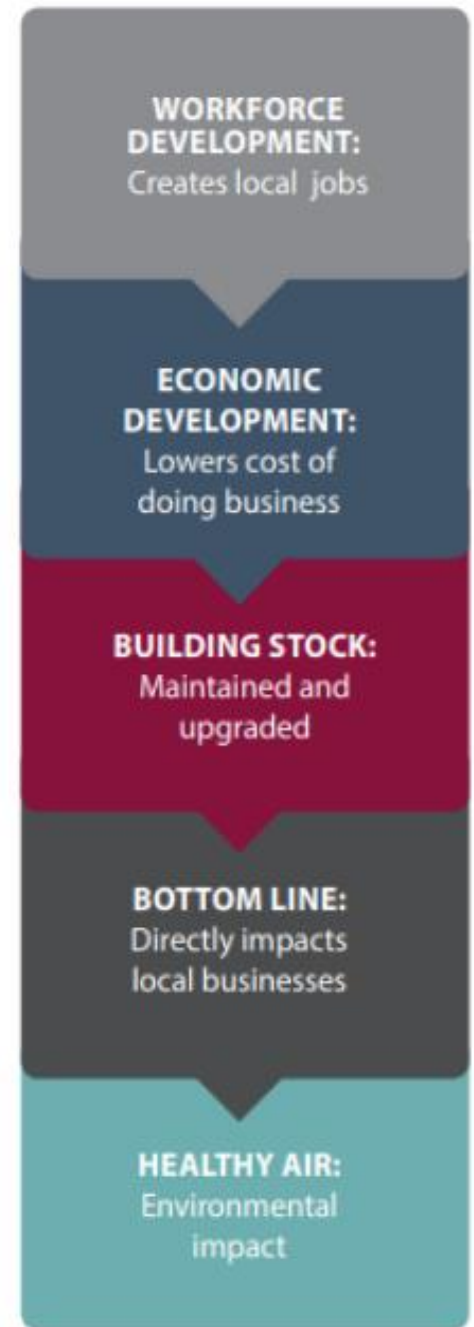


1. State passes legislation enabling use of property-based tax assessments for clean energy projects
2. Tax-collecting municipalities within the state pass local legislation to enable PACE programs
3. Programs are administered by the state, municipality, or contracted to an independent third-party administrator
4. Projects are financed by government bonds or loans from PACE capital providers

# Why PACE?

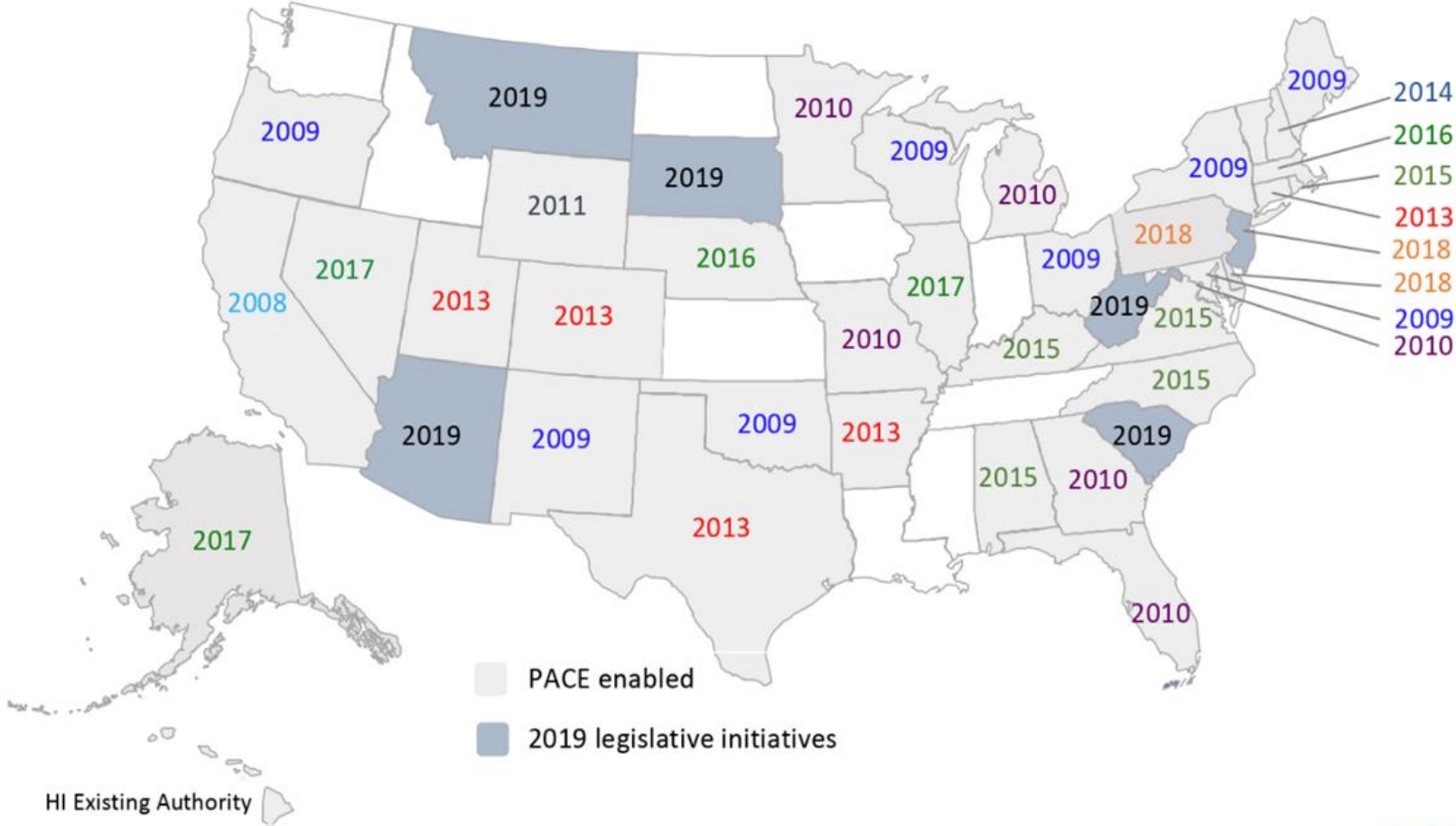


- No down payment
  - Covers 100% of the hard and soft costs of an energy project, eliminating the need for up-front capital
- No personal guarantees
  - Generally, delinquent PACE assessments are enforced like delinquent real property taxes
- Off-balance-sheet treatment preserves borrowing capacity
- Long term (useful life of improvements), fixed-rate
- PACE assessments transfer with property
- Existing PACE-eligible assets can be refinanced under certain conditions
- Energy savings often offset the cost of improvements



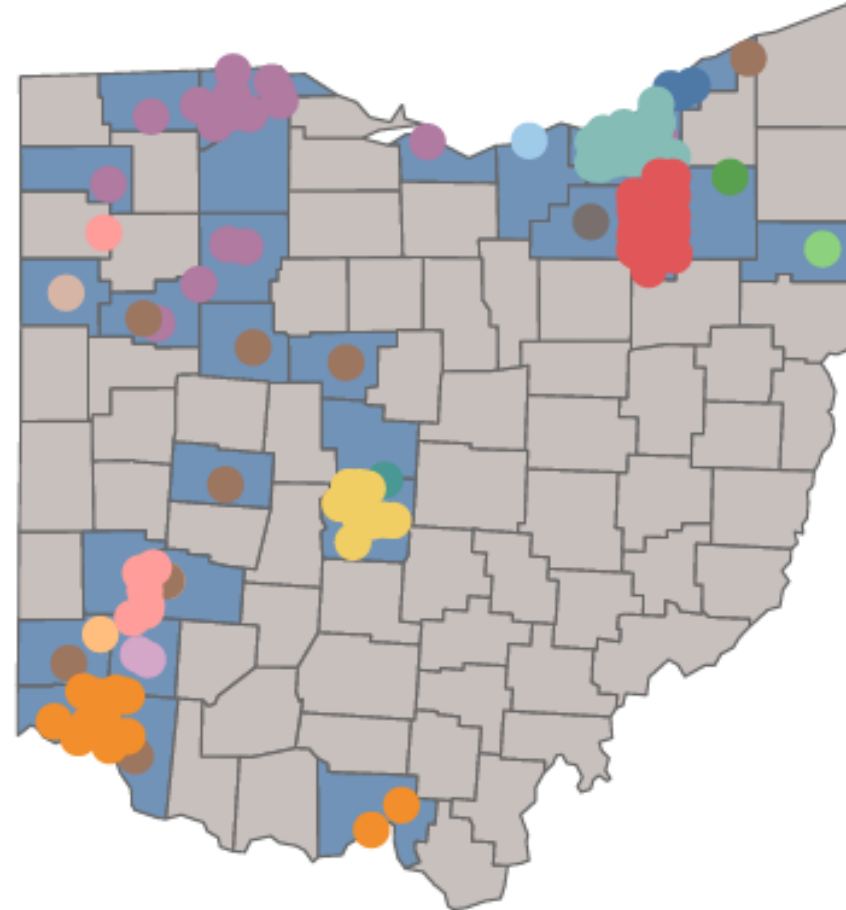
Source: PACENation

# PACE Nationwide (2020)



# Ohio PACE

- CPACE – Local programs active since 2009
- \$348,727,427.51 total PACE financing to date
- RPACE – Statewide program to become active in 2020



# Ohio PACE Programs





# Sustainability Initiatives

- Local governments can use PACE as a valuable tool to meet sustainability goals
- The Green Cincinnati Plan (Cincinnati, OH)
  - ✓ Advance the sustainability, equity, and resiliency of Cincinnati
- Recommendations include:
  - ✓ “Encourage development of high-performance buildings”
  - ✓ “Implement programs to increase solar energy generation for the private market (e.g. Solarize, PACE financing)”



<b>CLIMATE</b> 	<b>ENERGY</b> 	<b>FOOD</b> 
<ul style="list-style-type: none"><li>&gt; Green Cincinnati Plan</li><li>&gt; Greenhouse Gas Inventory</li><li>&gt; Air Quality</li></ul>	<ul style="list-style-type: none"><li>&gt; Community Choice Aggregation</li><li>&gt; Solarize</li><li>&gt; PACE Financing</li></ul>	<ul style="list-style-type: none"><li>&gt; Urban Agriculture</li><li>&gt; Food Waste</li></ul>
<b>GREEN ECONOMY</b> 	<b>MOBILITY</b> 	<b>RECYCLING</b> 
<ul style="list-style-type: none"><li>&gt; LEED Tax Development</li><li>&gt; Brownfields Redevelopment</li><li>&gt; Cut and Fill Permits</li></ul>	<ul style="list-style-type: none"><li>&gt; Free Parking for Electric Vehicles</li><li>&gt; Biking</li><li>&gt; Bikeshare</li></ul>	<ul style="list-style-type: none"><li>&gt; Recycling Program</li><li>&gt; What can be Recycled</li><li>&gt; Recycling FAQ</li></ul>

# Sustainability Initiatives

- City of Columbus, OH
- Selected as 1 of 25 leadership cities to participate in a 2-year acceleration program to tackle climate change and promote a sustainable future
- Goal to accelerate \$15 million in new clean energy financing through commercial and residential PACE



## American Cities Climate Challenge



Reduce building  
energy use

+



Increase  
renewable  
energy

+



Reduce vehicle  
travel

+



Electrify  
Vehicles

=



Cities Reach Paris  
Climate Goals

**SUSTAINABLE  
COLUMBUS**  
ANDREW J. GINTHER, MAYOR

# Sustainability Initiatives

- City of Bexley, OH
  - One of the first cities in Ohio to adopt Residential PACE legislation
  - Strong focus on improving sustainability practices
- Bexley's Environmental Sustainability Advisory Committee (ESAC) preparing to launch Residential PACE in 2020



*"Residents will have access to better interest rates and longer terms to help encourage feasible solar, windows, insulation, HVAC (heating, ventilation and air conditioning) and other energy efficient improvements"*

– Mayor Ben Kessler



# Ohio Case Studies



# Sycamore Township, OH

- Kids First Sports Center
- LED lighting, 150 kW solar
- \$656,000 PACE funded
- 40% Energy Savings, positive cash flow



*“We achieved a level of energy efficiency & cost control we never thought possible. PACE funded the solar array which will help power the building for the next 30 years.”*

- Jeff Metzger, Owner, Kids First Sports Center



# Cincinnati, OH

- Urban Artifact
- HVAC, windows, building shell
- \$225,000 PACE funded
- \$28,530 annual energy savings





# Dublin (Columbus), OH

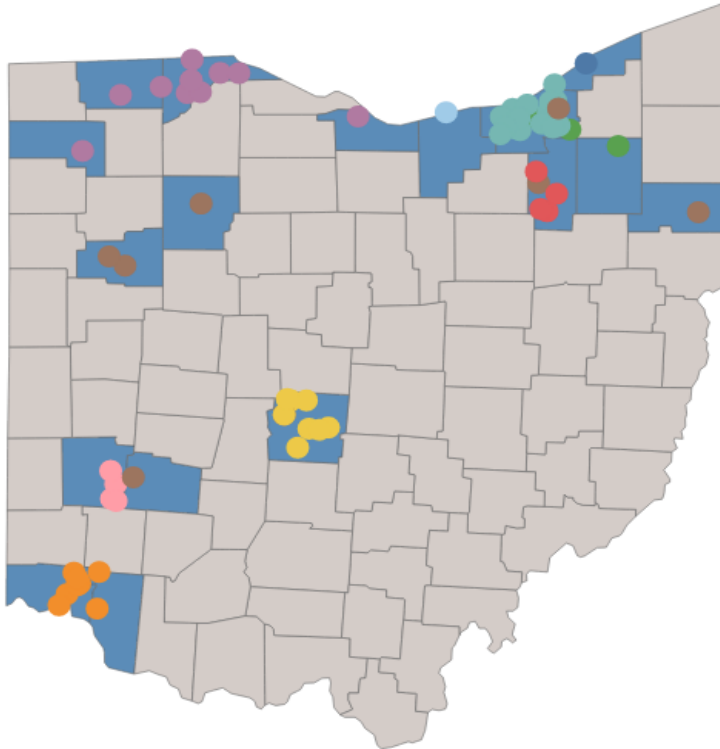
- Techmart (office and industrial complex)
- Lighting, HVAC controls
- LED lighting, 150 kW solar
- \$847,500 PACE funded (\$443,00 refinanced)
- \$92,500 annual energy savings



# Bricker PACE Resources



[www.bricker.com/PACE](http://www.bricker.com/PACE)



## 2019 PACE Financing in Ohio

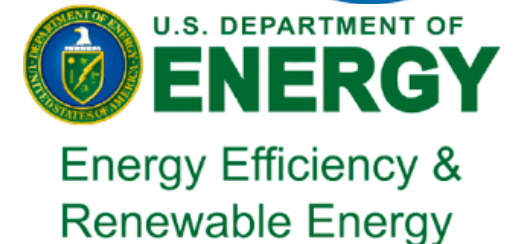
46 transactions

\$112.7 million invested

\$273.6 million invested in PACE projects in Ohio since 2012.



**Bricker & Eckler LLP** | [www.bricker.com/PACE](http://www.bricker.com/PACE) | [www.developohio.com](http://www.developohio.com)



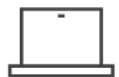
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## Panelist

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**Ben Kessler**

Mayor  
City of Bexley, Ohio

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# ABOUT (GREEN) BEXLEY





# WHY RESIDENTIAL PACE?

## How **PACE** works



1

Local government creates legislation



2

Lender gives funds to homeowner for solar panels



3

Property owner repays through property taxes





# PACE + ZONING REFORMS





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**Maryrose Myrtetus**

C-PACE Program Manager  
Philadelphia Energy Authority

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COMMERCIAL PROPERTY-ASSESSED CLEAN ENERGY FINANCING



# Philadelphia C-PACE Program

*Growing the City's Green Economy*

# Philadelphia Energy Authority



CLEAN, EFFICIENT, AFFORDABLE

## energy as a tool for impact

### ECONOMIC development

Projects that move the needle on carbon reduction are bringing established companies, investors and entrepreneurs to the city.

### CREATING jobs

Statewide, the number of clean energy jobs already outpaces the number of fossil fuel jobs.

### ALLEVIATING poverty

Reducing the energy burden for Philadelphians means homes that are safe, warm, healthy and affordable for the long term.

### IMPROVING public health

In public buildings, schools, homes and businesses, clean and efficient energy is a vehicle for improving the health of our communities.





# Philadelphia Energy Authority



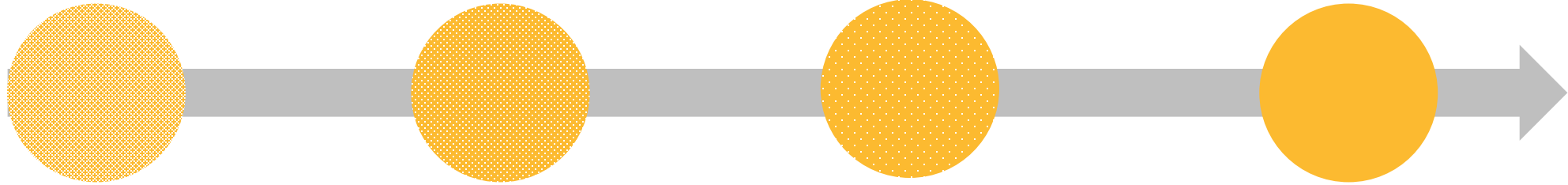
## Stoking the Green Economy

	New Project Investments	Jobs Created*
Year One: 2017	\$53 million	225
Year Two: 2018	\$48 million	759
Year Three: 2019	\$35 million	317
<b>Total To Date</b>	<b>\$136 million</b>	<b>1,301</b>
<b>Goal by 2026</b>	<b>\$1 billion</b>	<b>10,000</b>

\*Direct, indirect, and induced jobs

- ✓ Secured **70MW solar PPA** to procure 22% of City's electricity
- ✓ **~3MW of residential rooftop solar** contracted through Solarize program
- ✓ **80,000+ households** enrolled in water and sewer protection program
- ✓ **25% reduction** in energy consumption at Art Museum with \$12MM project
- ✓ Launched new C-PACE program

# C-PACE in Philadelphia



**2018:**

Pennsylvania authorized the creation of C-PACE finance programs

**2019:**

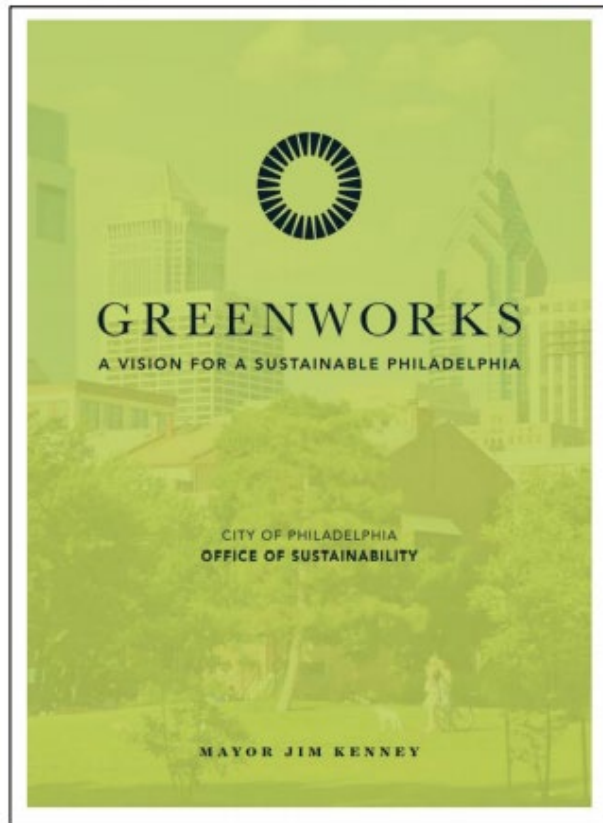
Philadelphia authorized C-PACE and assigned PEA as Program Administrator; PEA launches C-PACE program

**2020:**

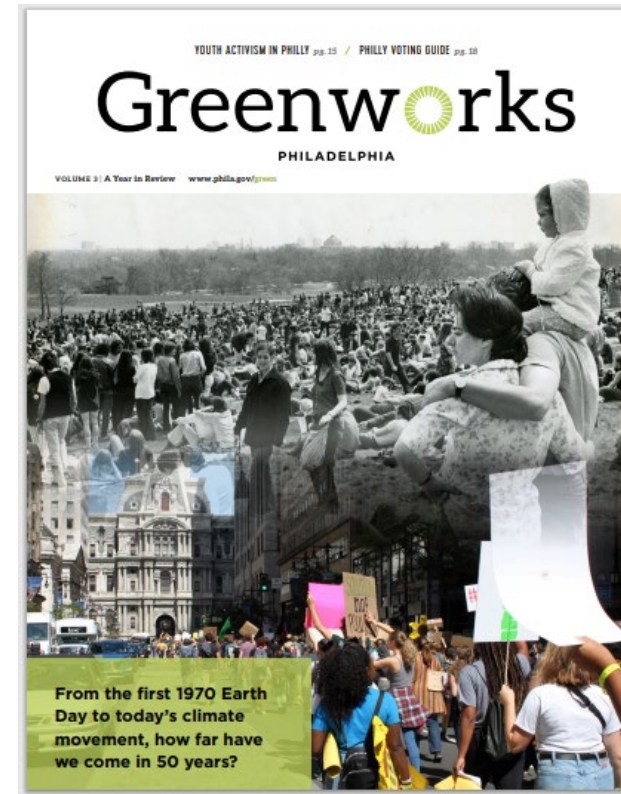
First deal in Pennsylvania closed in Philadelphia!

**Goal:** Philadelphia C-PACE program supports robust energy efficiency and clean energy growth throughout the City

# Philadelphia's Sustainability Vision



**2016 Sustainability Plan**



**2019 Annual Review**

# Philadelphia's Sustainability Vision

The image displays eight sustainability goals arranged in two columns. Each goal is represented by a colored rounded rectangle containing an icon and text. A yellow star is placed to the left of the first three goals in the left column, and another yellow star is placed to the right of the bottom goal in the right column.

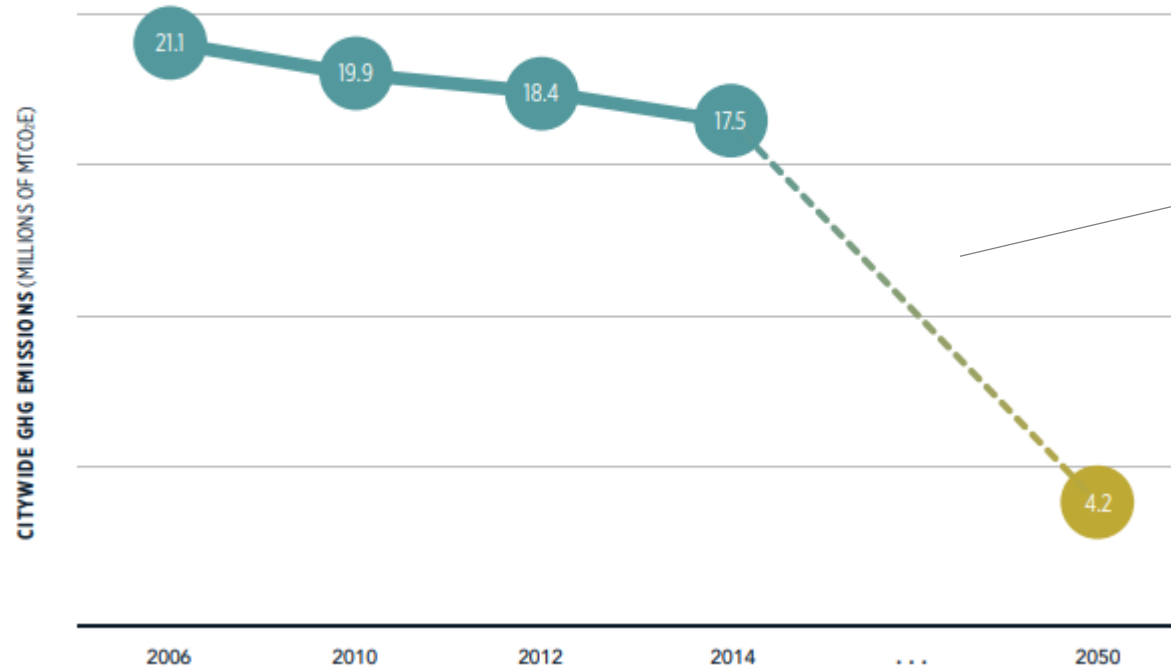
Goal	C-PACE Tool
ACCESSIBLE FOOD AND DRINKING WATER	Yes
HEALTHY OUTDOOR AND INDOOR AIR	Yes
CLEAN AND EFFICIENT ENERGY	Yes
CLIMATE PREPARED AND CARBON NEUTRAL COMMUNITIES	Yes
QUALITY NATURAL RESOURCES	No
ACCESSIBLE, AFFORDABLE, AND SAFE TRANSPORTATION	No
ZERO WASTE	No
ENGAGED STUDENTS, STEWARDS, AND WORKERS	Yes

★ = C-PACE is a tool for these goals



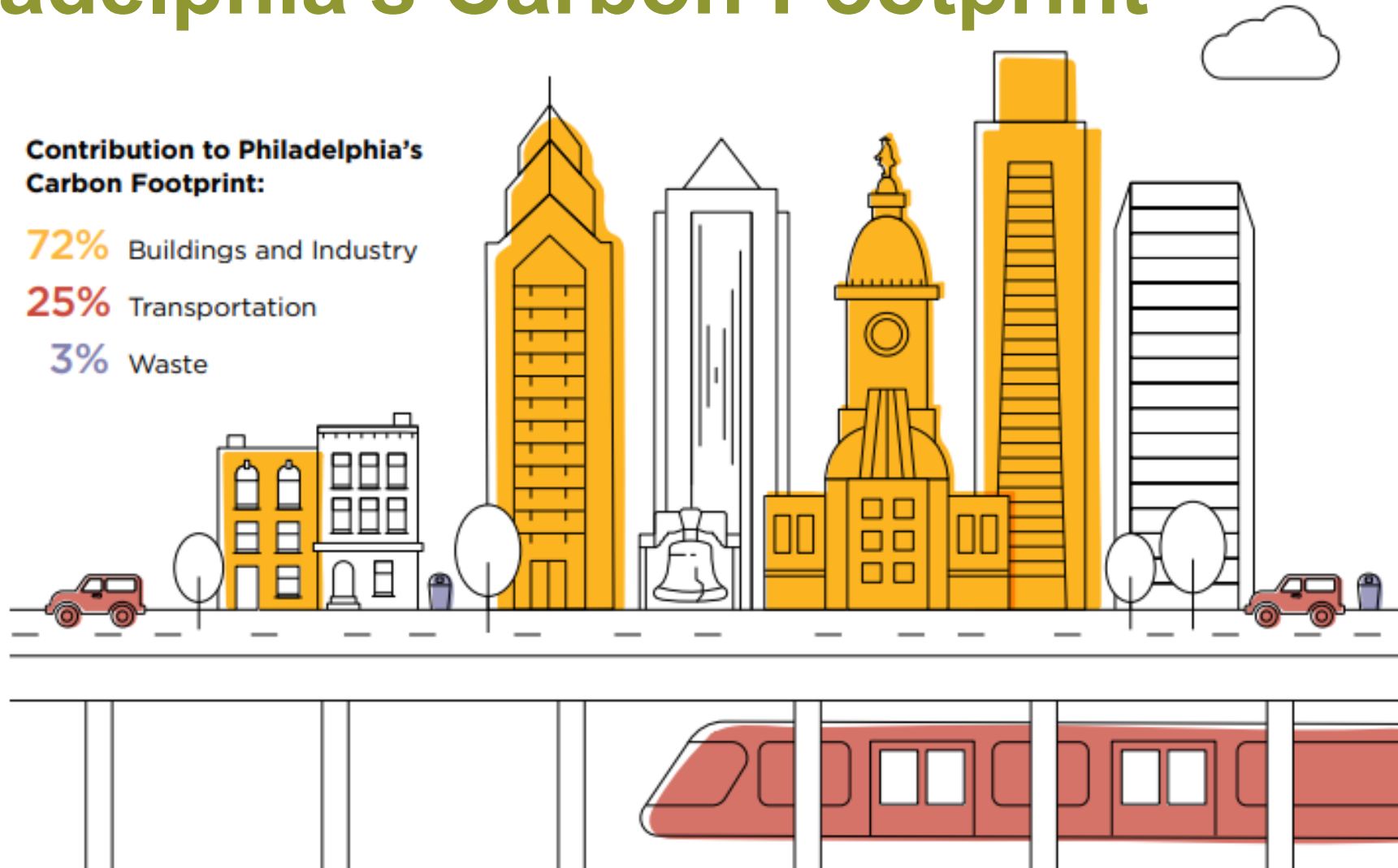
# Philadelphia's Carbon Reduction Goal

## PHILADELPHIA'S CARBON TRAJECTORY

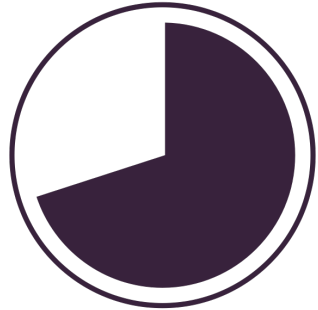


Mayor Kenney has committed Philadelphia to cutting citywide carbon pollution by **80% by 2050** (from 2006 levels)

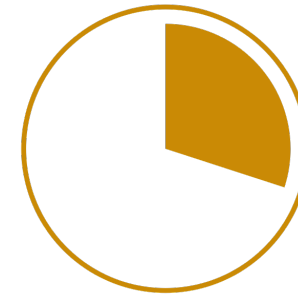
# Buildings & Industry Make Up 72% of Philadelphia's Carbon Footprint



# Tying It All Together with C-PACE



~70% of Philadelphia's carbon footprint comes from **buildings and industry**



The EPA estimates commercial buildings **waste 30% of the energy** they use

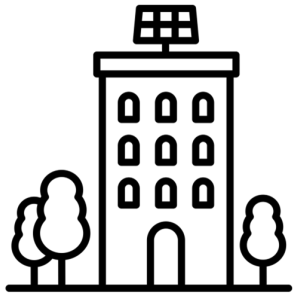


Philadelphia has committed to an **80% carbon reduction by 2050**



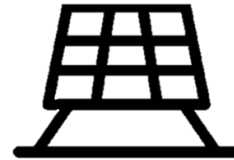
By some measures, **every \$1MM** of C-PACE deployed equates to **removing ~1,000 cars** from the road

# Ecosystem of Supportive Policies - New Within the Past 12 Months Alone



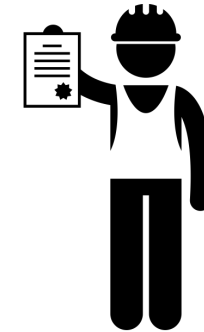
## Building Tune-Up

Affirmation of high performance or tune-up once every five years  
First deadline is in 2021



## Solar Rebate

\$0.10/watt for commercial installations  
\$0.20/watt for residential



## Building Permit Fee

Capped fees for building permits for solar installations  
Starting at \$200



# C-PACE in the COVID-19 Economy

1

## **Improves Cash Flow:**

Energy efficiency projects financed with C-PACE can generate annual savings

2

## **Provides Liquidity:**

Retroactive financing can reduce debt service payments or free up cash for businesses

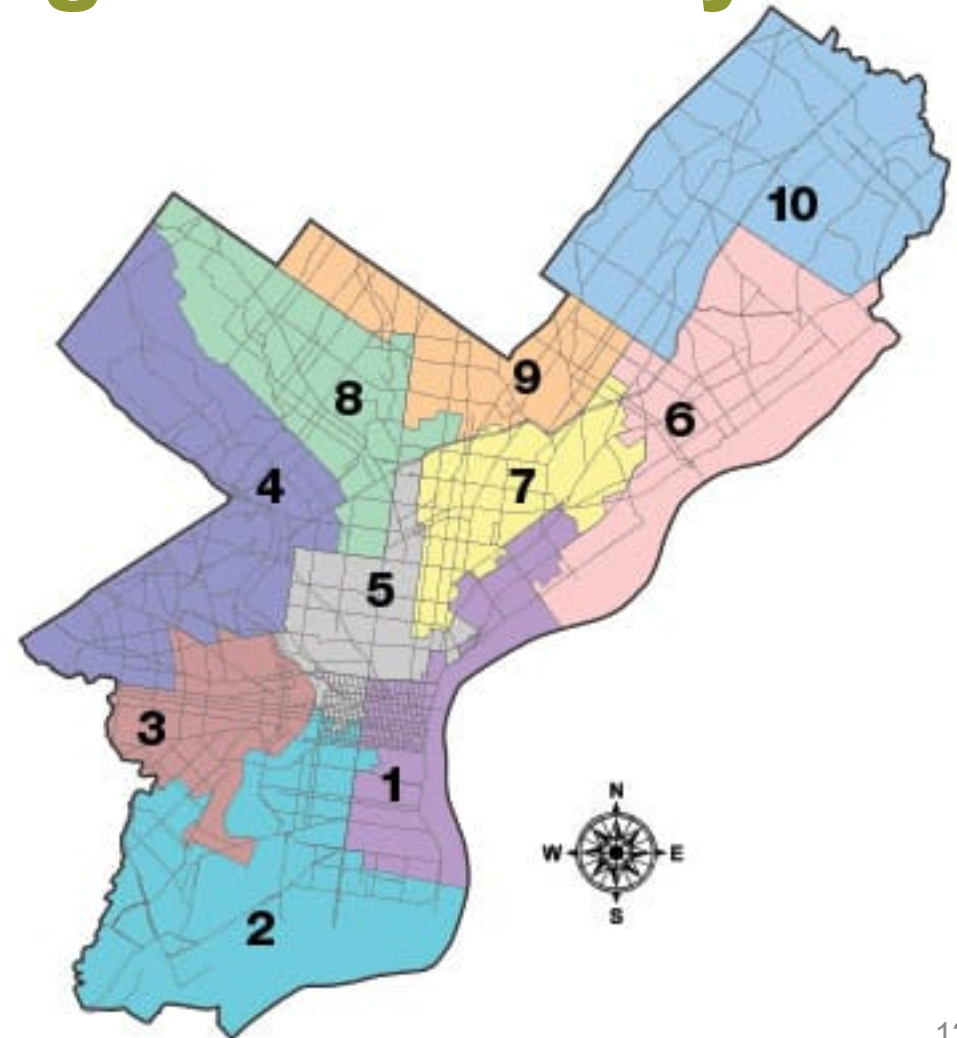
3

## **Strengthens City & Workforce:**

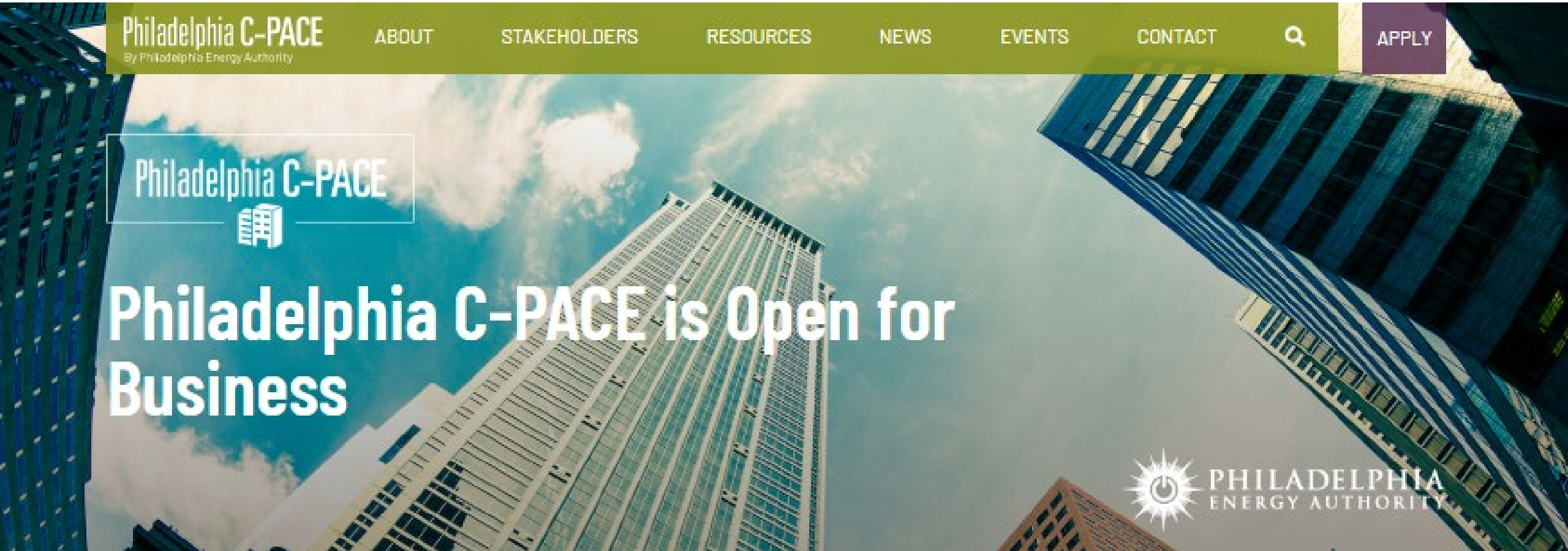
Addressing Philadelphia's carbon footprint creates a more resilient city

# C-PACE Pipeline Throughout the City

- Current pipeline of projects stretches across **8 out of 10** City Council districts
- C-PACE is a key financing tool to help certain projects round out their capital stacks – can be the difference between a project stalling and a project moving forward



# New Philadelphia C-PACE Website



Philadelphia C-PACE  
By Philadelphia Energy Authority

ABOUT

STAKEHOLDERS

RESOURCES

NEWS

EVENTS

CONTACT



APPLY

Philadelphia C-PACE  


# Philadelphia C-PACE is Open for Business



Philadelphia C-PACE



PHILADELPHIA  
ENERGY AUTHORITY

## Contact Information

Philadelphia Energy Authority

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[CPACE@philaenergy.org](mailto:CPACE@philaenergy.org)

215-686-4483

PhiladelphiaCPACE.org





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**Eric Alini**

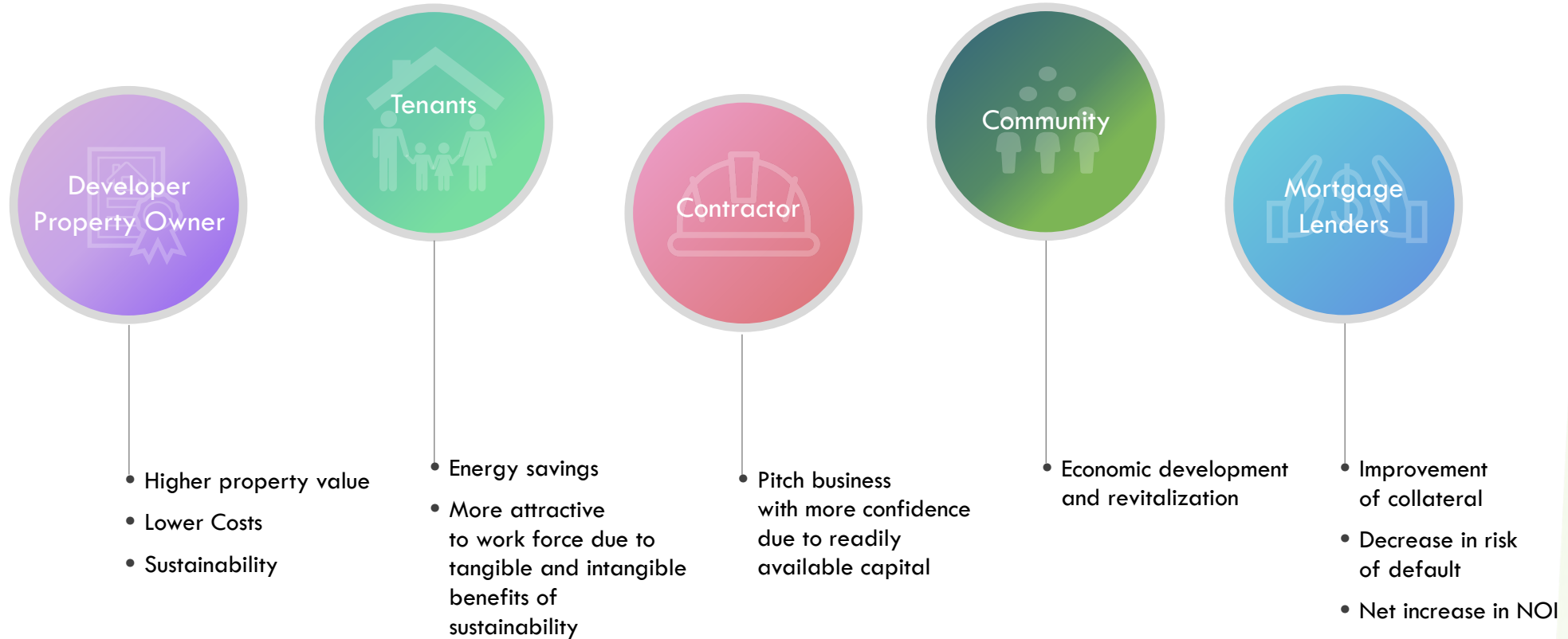
Managing Partner  
Counterpointe Real Estate Solutions

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COUNTERPOINTE SRE

# C-PACE benefits all Stakeholders



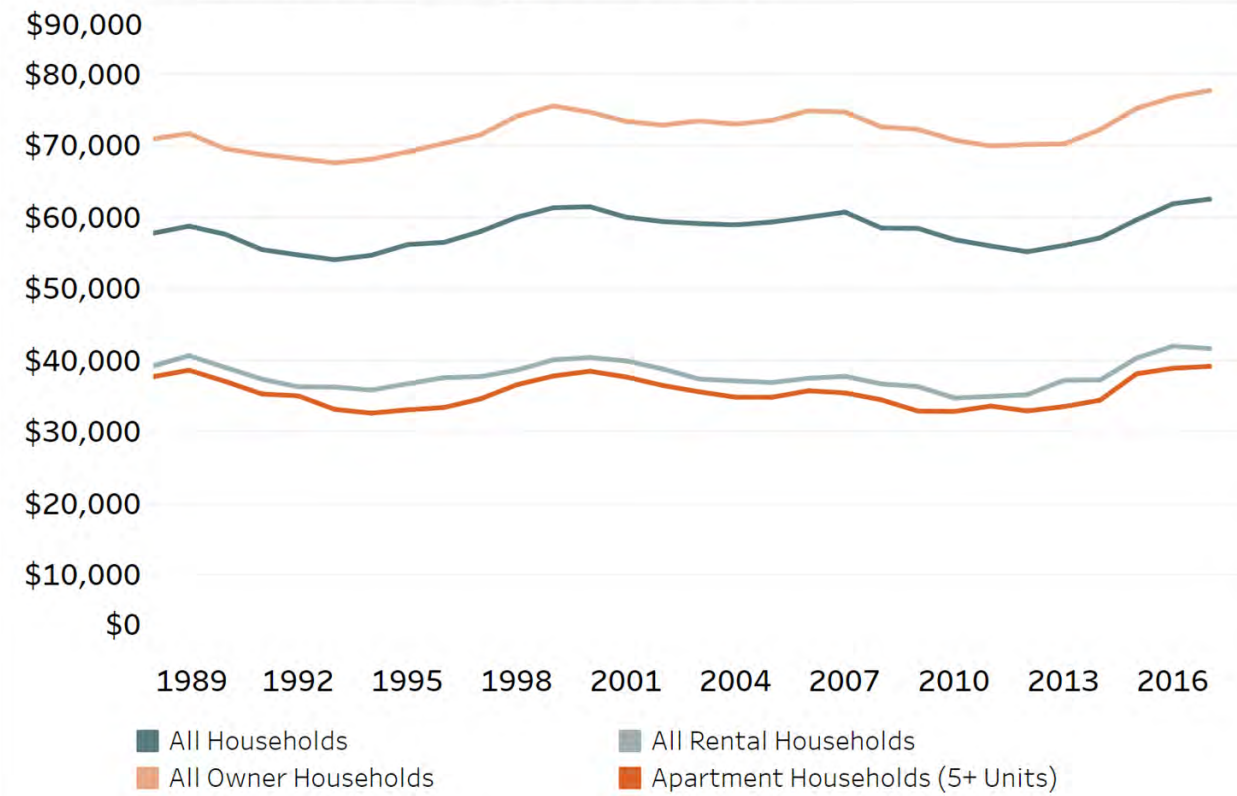


# Multifamily Demographics

## Apartment household data

- Apartment households in 5+ unit buildings have the lowest median income in the nation.
- 47% of apartment households have income <\$35k

Median Household Income (2018 Dollars)



Source: NMHC tabulations of Current Population Survey microdata, US Census Bureau. Updated 2019.



# Energy Injustice

7.3% vs 1.4% of Household Income

- low-income households pay an average of \$1.41 per square foot for utilities as compared to \$1.23 for non-low-income households.
- low-income populations often live in units that are leakier and use less efficient appliances.
- Despite the fact low-income households account for more than 30 percent of U.S. residential electricity use, only six percent of energy efficiency program investments in the U.S. are specifically geared toward low-income households

**TABLE ES1. Median income, utility bill, energy burden, and unit size for households based on income type, building type, building ownership, and household race for groups across all metro areas**

	Household type	Median annual income	Median size of unit (square feet)	Median annual utility spending	Median annual utility costs per square foot	Median energy burden <sup>1</sup>
<b>Income type</b>	Low-income <sup>2</sup> (≤80% AMI) <sup>3</sup>	\$24,998	1,200	\$1,692	\$1.41	7.2%
	Non-low-income	\$90,000	1,800	\$2,112	\$1.17	2.3%
	Low-income multifamily (≤80% AMI)	\$21,996	800	\$1,032	\$1.29	5.0%
	Non-low-income multifamily	\$71,982	950	\$1,104	\$1.16	1.5%
<b>Building ownership</b>	Renters	\$34,972	1,000	\$1,404	\$1.40	4.0%
	Owners	\$68,000	1,850	\$2,172	\$1.17	3.3%
<b>Head of household race</b>	White	\$58,000	1,600	\$1,956	\$1.22	3.3%
	African-American	\$34,494	1,290	\$1,920	\$1.49	5.4%
	Latino	\$39,994	1,200	\$1,704	\$1.42	4.1%
<b>All households</b>	N/A	\$53,988	1,573	\$1,932	\$1.23	3.5%

<sup>1</sup> Energy burden is the percentage of household income that is spent on energy bills. To calculate median energy burden, we calculated energy burden for all households and then took the median. This value differs from the median energy burden that is calculated using median annual utility spending and income.

<sup>2</sup> Low-income includes both single- and multifamily households. <sup>3</sup> Area median income (AMI) is the median dollar amount that divides the population into two equal parts.

Source: American Housing Survey (Census Bureau 2011 and 2013a).

# Supports Sustainability Goals of Local Gov.



2030  
DISTRICTS<sup>®</sup>  
NETWORK

- ALBUQUERQUE
- ANN ARBOR
- BURLINGTON
- CINCINNATI
- CLEVELAND
- DALLAS
- DENVER
- DETROIT
- ERIE
- GRAND RAPIDS
- ITHACA
- NEW YORK CITY
- PHILADELPHIA
- PITTSBURGH
- PORTLAND, ME
- SAN ANTONIO
- SAN DIEGO
- SAN FRANCISCO
- SEATTLE
- STAMFORD
- TORONTO
- TUCSON





# Private Capital Makes Impact

CSRE provides verifiable impact to reduce climate change and advance ESG goals

## 26,940 ACRES OF FOREST

Annual energy savings from our projects is estimated at more than 30,000,000 kWh, which equals the carbon sequestering capacity of 26,940 acres of forest.

## 1,764 LIVES BENEFITTED

We have supported more than 50 seismic strengthening projects, primarily in CA, while resiliency programs represent additional opportunity.

## 3,672 JOBS

Our financing supports job growth in clean and "green" industries as well as through the economic development often represented by retrofit and new construction project.

## ESG BY THE NUMBERS

## 20,628 t(CO2)e

The energy savings of our efficiency and renewable projects amounts to an annual reduction in carbon emissions of nearly 21,000 thousand metric tons.

## 75% ENERGY EFFICIENCY

Seventy five percent of our capital invested supports energy efficiency, often with a blend of seismic, solar, and green roof measures.

## DIVERSE PROPERTY TYPES

Multifamily, healthcare and hospitality represent our primary areas of investment to date; however, our programs cover all commercial property types and uses.



# What Chicago PACE can do that traditional financing can't?

100% financing secured by the property and supported by a priority tax assessment with transferability of the lien

Lower fixed interest rates for 5-30 years through the Public/Private tax assessment mechanism



A highly innovative and effective tool for improvements to commercial and multifamily real estate



# C-PACE Illustrative Financing

## C-PACE Characteristics

Property Location	<ul style="list-style-type: none"><li>• Within Active PACE Jurisdictions</li></ul>
Project Scope	<ul style="list-style-type: none"><li>• Upgrade/Retrofit, New Construction<sup>1</sup>, and Previously Completed Projects<sup>1</sup></li></ul>
Improvement Types	<ul style="list-style-type: none"><li>• Energy efficiency, renewable energy, water conservation, seismic retrofit, and risk mitigation</li></ul>
Tenancy	<ul style="list-style-type: none"><li>• Stabilized or Transitional</li></ul>
Assessment Size	<ul style="list-style-type: none"><li>• \$1,000,000 - \$100,000,000</li></ul>
Interest Rates	<ul style="list-style-type: none"><li>• 5.25% to 6.25% (fixed)*</li></ul>
Term	<ul style="list-style-type: none"><li>• 5 to 30 years, based on estimated useful life of project</li></ul>
Amortization	<ul style="list-style-type: none"><li>• No balloon payments; assessments are self-amortizing</li></ul>
Maximum Assessment to Value <sup>3</sup>	<ul style="list-style-type: none"><li>• Up to 35%</li></ul>
Maximum Combined LTV <sup>3</sup>	<ul style="list-style-type: none"><li>• Up to 95%</li></ul>
Minimum Combined Loan and Assessment <sup>3</sup>	<ul style="list-style-type: none"><li>• DSCR 1.00x</li></ul>
Prepayment Provisions	<ul style="list-style-type: none"><li>• Flexible Prepayment Terms</li></ul>
Recourse	<ul style="list-style-type: none"><li>• Non-Recourse</li></ul>

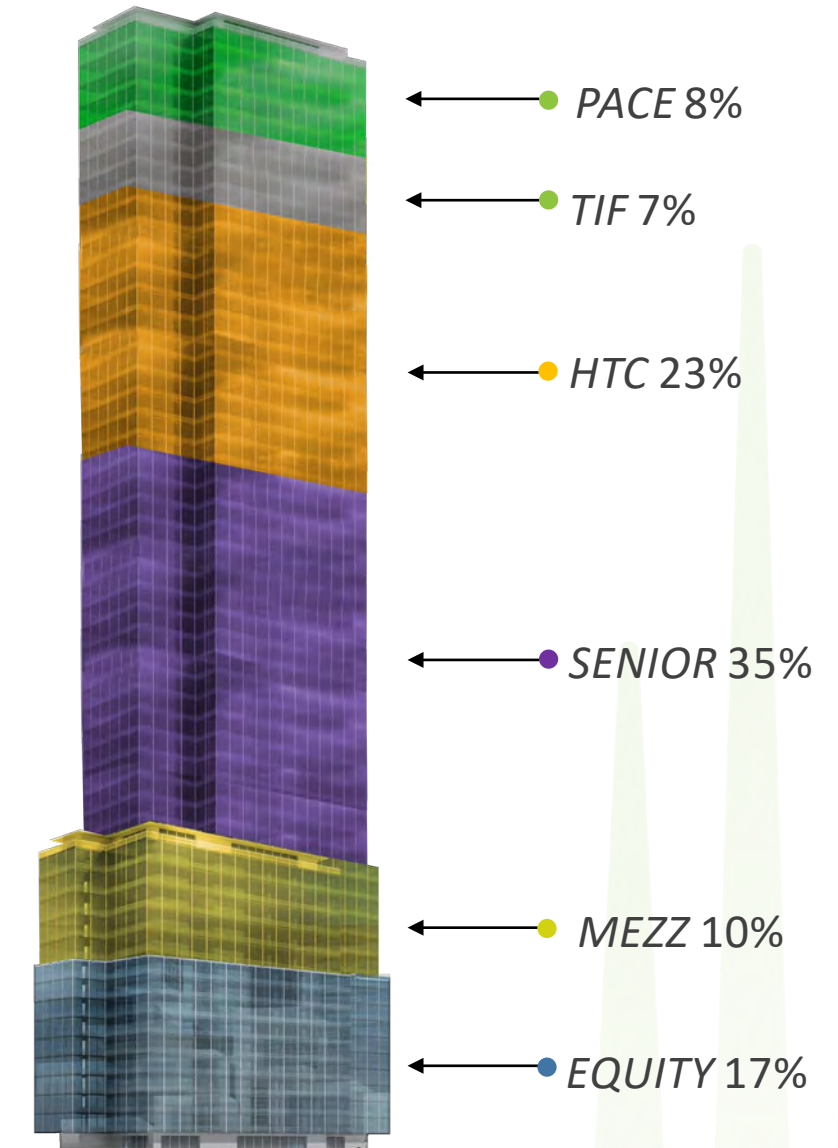
\*as of 9/1/19



# PACE is Ideal for Complex Capital Stacks

PACE Financing in the project capital stack:

- Effective Preferred Equity in Project Capital Stack reducing need for Equity
- Sponsor keeps more higher % of the project
- Higher returns for equity
- Lower cost of funds shortens the stabilization period



# Chicago PACE Enabling Legislation

- The Illinois Property Assessed Clean Energy Act was enacted in 2017 and authorized local units of government to create PACE programs.
- The City established Chicago PACE by adopting an ordinance (SO2018-5032) and program report on October 31, 2018 that meet the requirements of the Illinois PACE Act.
- The Program supports the City's sustainability and economic development goals while promoting the public policy benefits of creating local jobs, promoting local utility programs and incentives, and the engagement of Minority- and Women-Owned Enterprises.

# Property Eligibility

In order to be eligible for the Chicago PACE program:

- Property may not be an asset to a current bankruptcy
- Property Owner must be current on all taxes, special assessments, water or sewer charges or other property assessed clean energy program assessments
- No notices of default or other evidence of property-based debt delinquency recorded and not cured
- No involuntary liens on the property, including, but not limited to, construction or mechanics liens, lis pendens or judgments against the record owner, environmental proceedings, or eminent domain proceedings



# Eligible Projects and Costs

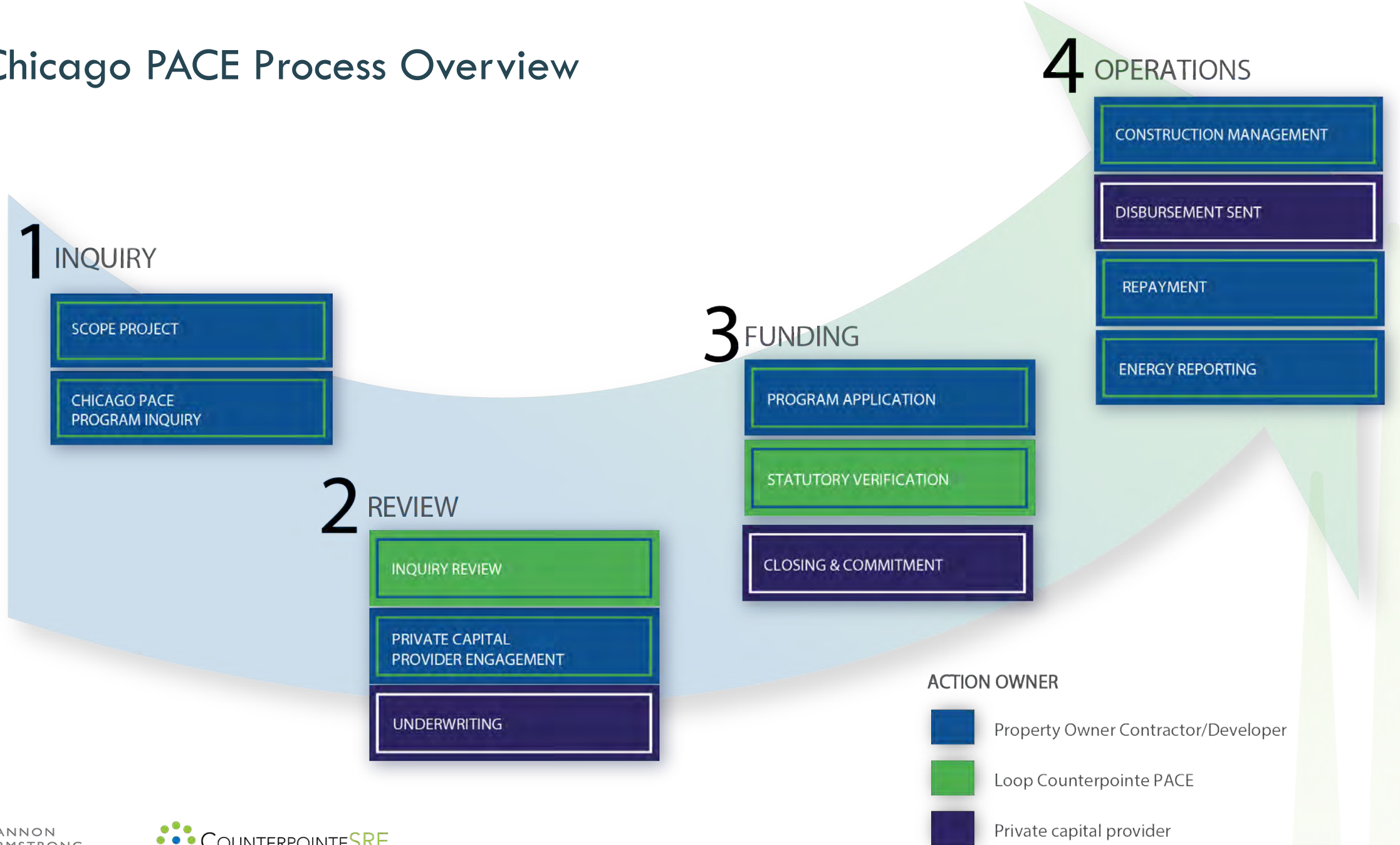
Improvements must be the installation or the modification of permanently affixed improvements that improve energy efficiency, conserve water, or generate renewable energy.

Financing may include the cost of materials and labor necessary for installation or modification as well as certain other eligible costs include all related work, financing costs, and soft costs

## Examples of Eligible Soft Costs

- Designs, audits and surveys, building permits, inspections, engineering, commissioning costs and service contracts
- Pre-paid warranties and service contracts for repairs and maintenance
- Related carpentry, electrical work, and other costs associated with the Eligible Energy Project
- Other improvements directly related to the energy improvements (e.g. roof upgrades to support a roof-mounted solar PV installation)
- Financing fees, and other Chicago Program costs

# Chicago PACE Process Overview





## Where is the national market today?

- Retrofits – Multifamily, healthcare and offices while they are vacant and considering adaptation to layout and HVAC
- Rescue Finance / Lookback to recently completed projects
- New Construction – Multifamily and some sectors as primary mortgage and construction lenders invest



# Resiliency: The Responsive Function of C-PACE

## Resiliency

- Wind/Storm mitigation technologies and building envelope
- Seismic Strengthening
- Generators and battery backup
- Fire resiliency
- Enhanced HVAC filtration, non-contact building automation, IAQ monitoring
- Next?

## Agile Programs adopt qualifying measures as needed

- San Francisco | Seismic
- Florida | Wind Hardening and Battery Backup

## Equality | Energy Justice

- Chicago | Invest South West
- HUD developments





# CASE STUDY: THE MILLENNIUM



## PROJECT

**Development Stage:**

New Construction

**Building Type:**

Multifamily / Mixed Use

**City:**

Edina, Minnesota  
Minneapolis/St. Paul MSA

**Developers:**

Dakota Pacific  
Luxe Residential

## PROPERTY DETAILS

**Property Name:**

Millennium Sixty-Six

**Scale:**

Six stories

227 units

11 affordable units

Parking garage

**Anticipated Occupancy**

July 2021



3250 West 66th Street. Edina, MN  
(rendering)

## IMPROVEMENT TYPES

- Building Envelope
- HVAC
- Direct Hot Water
- Lighting
- Renewable energy
- Low-flow fixtures

## BENEFITS

- Reduce WACC
- Increase Leverage
- Pass through expense
- Fully non-recourse to sponsor
- Combine with tax credits
- Retain utility rebates & incentives

## ENERGY IMPACT


**Electricity Use Reduction**

3,150 MWhs/year

“The low-cost capital allows us to invest in infrastructure that will reduce our carbon footprint, and more tangibly, everyone’s utility bills without a compromise to the luxury experience we are creating at Millennium Sixty Six.”

- Lane Critchfield  
Dakota Pacific

# CASE STUDY: THE RESERVE HOTEL



**\$21.25 Million**  
25YR Term Fixed Rate  
C-PACE Financing

**\$3 Million**  
Estimated Lifetime Savings

## PROJECT

**Development Stage:**  
Gut Rehab

**Property City:**  
Chicago, IL

**General Contractor:**  
W. E. O'Neil Construction Co.

**Developer:**  
The Prime Group

## IMPROVEMENTS

- HVAC: Boiler, Pump and FCUs
- Double-pane Windows
- Interior LED Lighting
- Low Flow Fixtures
- Elevator Destination Dispatch
- Solar/ Renewable



208 S. LaSalle Street  
Chicago, Illinois

## PROPERTY DETAILS

**Property Name:**  
The Reserve Hotel

**Property Type:**  
Hospitality

5 Floors  
232 Guest Rooms  
155,810 Square Feet

## BENEFITS

- Reduce WACC
- Increase Leverage
- Pass through expense
- Fully non-recourse to sponsor
- Combine with tax credits
- Retain utility rebates & incentives

"The Chicago PACE program provided funding that we will direct towards making the best possible energy efficiency and reliability decisions for our property, while helping us keep our capital costs down."

**Michael W. Reschke**  
Chairman/CEO  
The Prime Group



## CASE STUDY:

# LETTS INDUSTRIES | GREEN ROOF



**\$1.02 Million**  
20YR Term Fixed Rate  
C-PACE Financing

**\$57,508**  
Estimated Annual Savings

### PROJECT

**Development Stage:**  
Retrofit

**Property City:**  
Detroit, MI

**Project Developers:**  
Inhabitect LLC and  
Environmental Consulting &  
Technology

### IMPROVEMENT TYPES

- Permeable Pavers (6,600 sq. ft.)
- Blue Roof (9,200 sq. ft.)
- Rain Garden (1250 sq. ft.)
- Green Roof (15,000 sq. ft.)
- Building Envelope
- Solar Renewables



1111 Bellevue Street (Aerial Rendering)  
Detroit, Michigan

### PROPERTY DETAILS

**Property Name:**  
Letts Industries Building

**Building Type:**  
Mixed-Use

Multi-tenant  
Lofted, Industrial/ Flex Office  
Building

### BENEFITS

- Reduce WACC
- Increase Leverage
- Pass through expense
- Fully non-recourse to sponsor
- Combine with tax credits
- Retain utility rebates & incentives

*“Unlike other forms of infrastructure, green roofs provide triple bottom line benefits in both the public and private sectors. PACE financing provides the opportunity for this value added piece of infrastructure to be available to a wider audience and more financial feasible, on new and retrofit projects, than ever before.”*

Nathan D. Griswold, GRP, ASLA, CNSP  
President  
Inhabitect, LLC



# CASE STUDY: HYATT CENTRIC



**\$10,466,000**  
25YR Term Fixed Rate  
C-PACE Financing

**\$1,551,065**  
Interest savings over 3-year  
development & stabilization

## PROJECTS

**Development Stage:**  
Ground Up Construction  
**Building Type:**  
Hotel  
**Property Name:**  
Hyatt Centric  
**Property City:**  
Sacramento, CA  
**Developers:**  
1122 7th Street LLC

## PROPERTY DETAILS

11 Floors  
172 Guest Rooms  
109,500 square feet  
Ground floor dining/mixed use  
Business/Fitness Center



1128 7th Street  
Sacramento, California

## IMPROVEMENT TYPES

- Building Envelope
- HVAC and/or chillers
- Wind or seismic risk mitigation
- Lighting
- Renewable energy
- Cool or Green Roof

## BENEFITS


- Reduce WACC
- Increase Leverage
- Pass through expense
- Fully non-recourse to sponsor
- Combine with tax credits
- Retain utility rebates & incentives

*"PACE filled a very important gap in the capital stack to complete this loan and get construction of the Hyatt Centric underway. We have found it to be a great tool for hotels to take advantage of."*

*Marc Sallette  
CBRE Senior Vice President*



# CASE STUDY: ACUTE-CARE HOSPITALS



**\$96.5 million**  
C-PACE Financing

**\$40 million**  
Refinance of past spend  
or “look back”

## PROJECT

**Development Stage:**  
Facility Upgrade

**Building Type:**  
Hospital Medical Facilities

**Property Locations:**  
National

## IMPROVEMENTS

- ✓ HVAC
- ✓ LED Lighting
- ✓ Cool Roof
- ✓ Elevator Modernization
- ✓ Water Conservation
- ✓ Resiliency

## PROPERTY DETAILS

1,309 Total Beds

Multiple Facilities

Multiple C-PACE enabled states

Average Building Age Exceeds  
50 Years

## BENEFITS

- ✓ Cash Out Refinance of Past CapEx
- ✓ Facilitated Projects with Long Paybacks
- ✓ Non Recourse to Owner
- ✓ Attractive Fixed Rates



*“The funding of nearly \$50 million, represents the largest single-borrower C-PACE transaction in the nearly 10-year history of the program.”*

James Hamill  
Managing Director  
CSCDA



# CDFA-Bricker PACE Webinar Series: Focusing on Sustainability Using PACE

## Panelist



**Steve Melink**

CEO  
Melink Corporation

*In Partnership  
with*



**Bricker & Eckler**  
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Net Zero Energy

HQ2

Steve Melink  
513.965.7308  
smelink@melinkcorp.com





# MELINK: WHAT WE DO

## Melink® T&B

- National HVAC Test & Balance Contractor
- 100% Self Performing NEBB Certified Technicians



## Melink® Solar

- Developer & EPC Contractor
- Commercial Ground Mount, Roof Mount, & Parking Structures



## Intelli-Hood®

- Pioneer & DCKV Industry Standard
- Global Installation & Project Management



## Melink® GEO

- Geothermal Developer
- Pre-Engineered Pump Package
- GHX Design & Commissioning
- Ground-loop Financing

**Integrity. Service Excellence. Innovation.**





Come tour our facility in Cincinnati!

# OUR NET-ZERO HEADQUARTERS

## Walking the talk in environmental stewardship

Technologies used to save approx. \$60,000 per year in energy costs and earn an Energy Star Rating of 99:

Geothermal, Natural Lighting, Building Automation Software, Waterless Urinals, Solar Photovoltaic, Wind Energy, Solar Thermal, Conservation Habits

See our *Annual Sustainability Report* at [melinkcorp.com](http://melinkcorp.com)







# Goals

## Mainstream 'NZE' Buildings

- **Cost Premium of NZE < 15%**
- **PACE Financing of NZE Premium**
- **Energy Savings > PACE Assessment > HQ1**
- **Demand Savings > 2X HQ1 (50kW vs 100kW)**

# Main Features

- **Super Insulation**
- **LED Lighting & Shade Controls**
- **Intelligent ERV/DOA**
- **Super GEO HVAC System**
- **Solar Canopy**



# Super Insulation





A modern office interior featuring several cubicles with light-colored wooden desks and dark grey partitions. Each workstation is equipped with a black office chair and a computer monitor. The ceiling is fitted with recessed rectangular light fixtures, some of which are illuminated. Large windows with dark frames are visible on the left wall. A tall, white cylindrical pillar stands on the right side of the room. The floor is covered with a patterned carpet tile. The overall atmosphere is clean, professional, and well-lit.

# Smart Lighting & Shade Controls



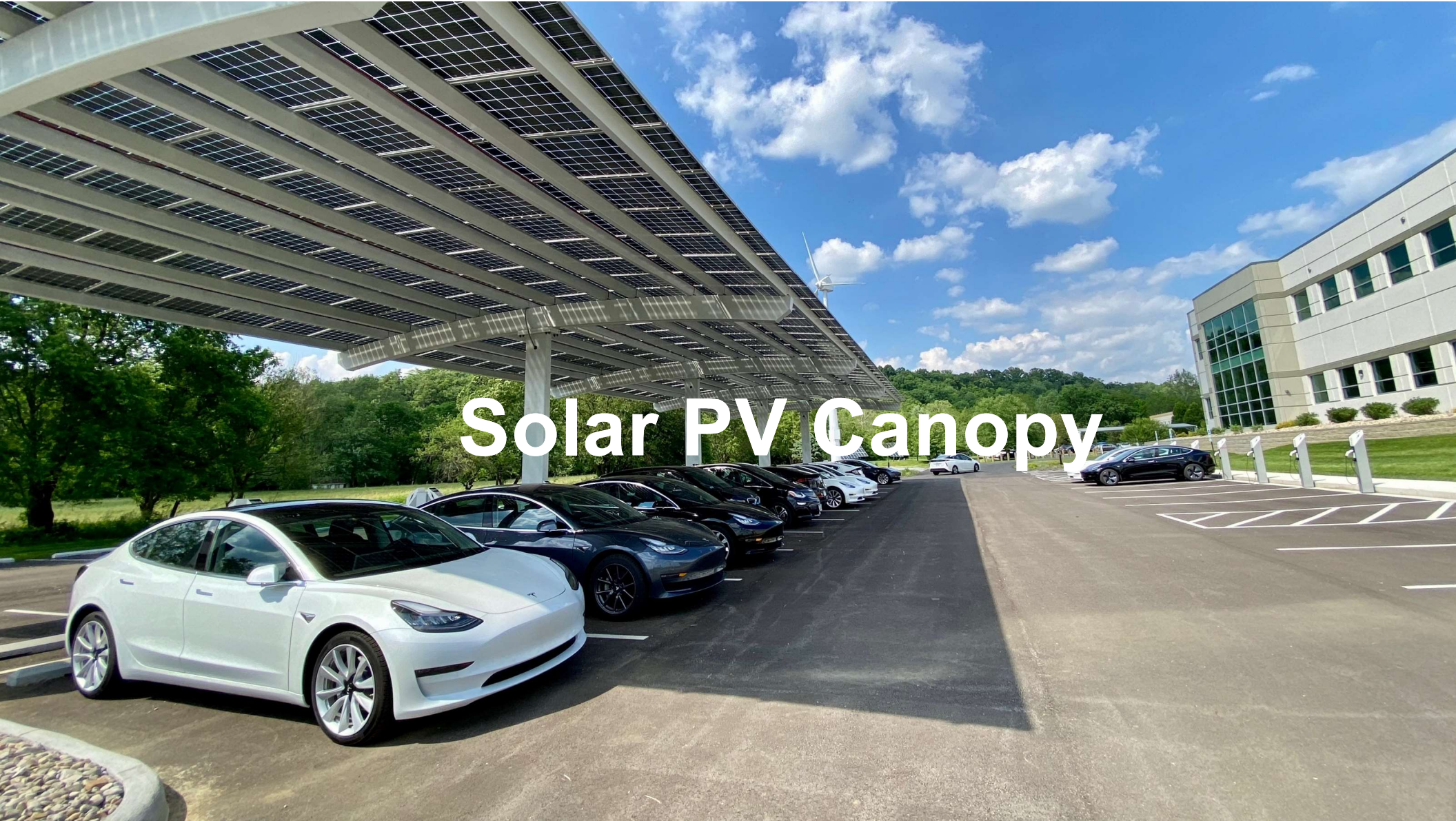
# Smart ERV/DOA



# Super GEO HVAC System







# Solar PV Canopy

**NZE Normally for Building Only  
... Melink Including EV Chargers**

# Construction Cost

- Avg Office Bldg per Code \$170/sf
- Super-Insulation \$ 8/sf
- LED Dim & Shade Control \$ 2/sf
- Intelligent ERV/DOA \$ 2/sf
- Super Geo HVAC (10% ITC) \$ 7/sf
- Solar PV (roof + 30% ITC\*) \$ 4/sf



# Construction Cost

- **Total Construction Cost**                      **\$193/sf**
- **Total Super-NZE Premium**                      **\$ 23/sf**
- **Total Super-NZE Premium**                      **12%**
  
- **Actual NZE Premium(PV,S-Geo)**                      **\$ 11/sf**
- **Actual NZE Premium**                      **7%**

# Design Energy Savings

- **Trace Energy Model by Motz Engr**
  - **54% Improvement ASHRAE 90.1**
  - **Usage = \$16,013/yr = \$1,334/mo avg**
  - **22.0 kBTU/sf/yr = Top 5%**

# Actual Energy Savings

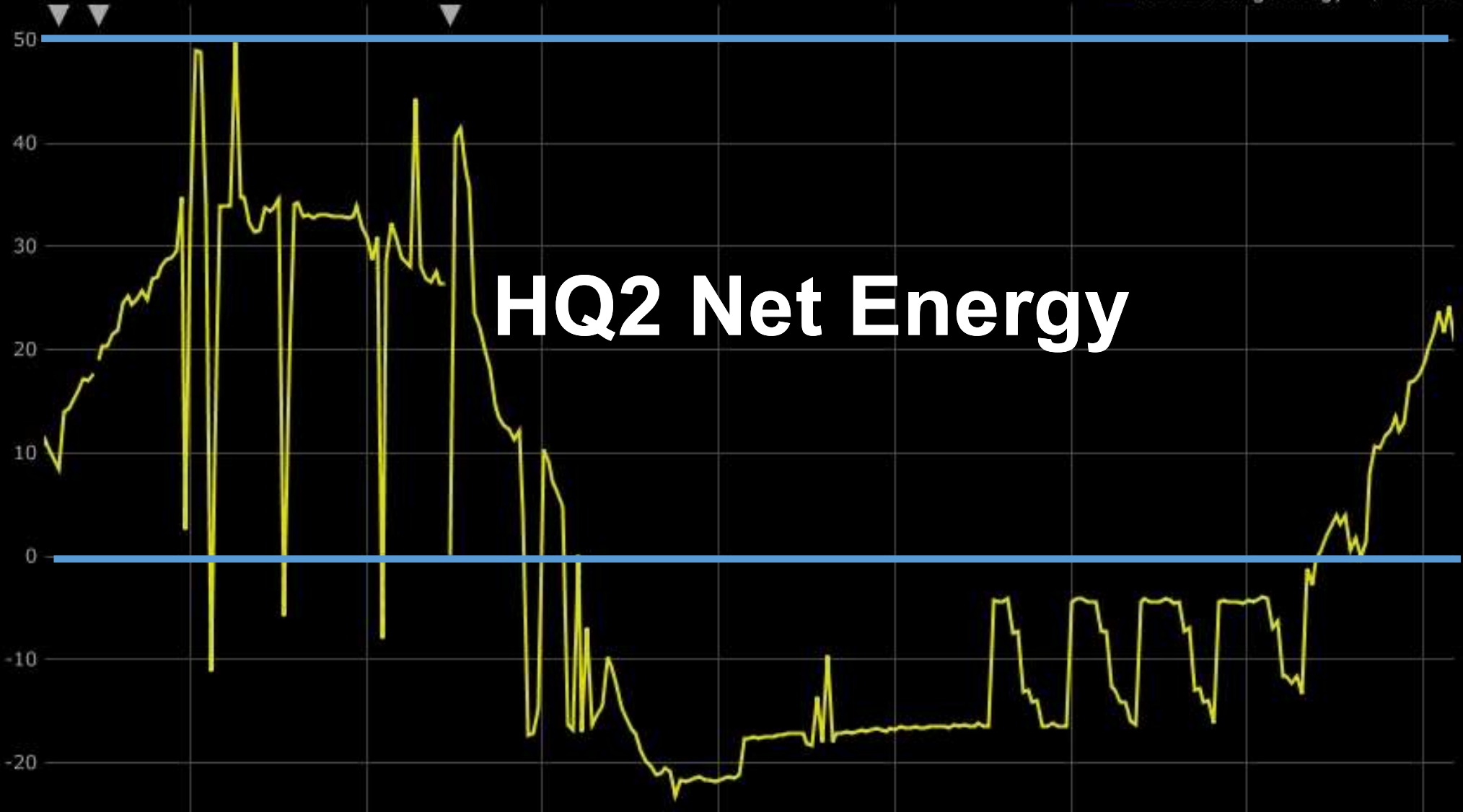
## Duke Energy Bill: May-June

- \$0.0 Due (\$2.53 Credit)
- 5217 kWh = 62,604 kWh Annualized
- 62,604 kWh = 213,480 kBTU
- 7.1 kBTU/sf/yr = Top 1% (Includes EVs)
- Demand = 44.6 kW (Includes EVs)



Building Net Energy Building Net Zero Energy

Net Building Energy Notes



HQ2 Net Energy



# **Actual Energy Savings Considerations**

- **Jan – Apr Energy Adjustments**
  - **Construction Completed – Jan**
  - **Solar PV Completed – Mar**
  - **Duke Net Meter – Apr**
  - **Melink BAS Completed – Apr**



# PACE Financing

- **\$1 Million 30 Year Term @ 6.25%**
- **Increased Assessment = \$87,812/yr**
- **Increased Assessment = \$7,317/mo**
- **Energy + Demand Savings > \$7,000/mo  
(Especially with increasing EV Loads)**

# PACE Financing

- **Finance EE & RE < 30% NC or 25% EB**
- **Off Balance Sheet Financing**
- **Tenant Pays Thru Triple Net Lease**
- **Tenant Gains Energy + Demand Savings**
- **Tenant Gains Hedge Against Rate Hikes**
- **Tenant Gains HR + PR Benefits**

# HR & PR Benefits

- **Healthier Employees > Productivity**
- **Stronger Brand > Recruiting/Retention**
- **Stronger Brand > Customers & Sales**
- **Growth & Success > Happier Employees**

# Incentives

- **PACE Loan = \$1M on \$5M Building**
- **Solar PV Tax Credit = 30%**
- **Geothermal Tax Credit = 10%**
- **179D Cost Segregation = Accel Deprec**
- **U.S. Dept of Energy Grant = \$275K**





**AADN**  
**8 TON**

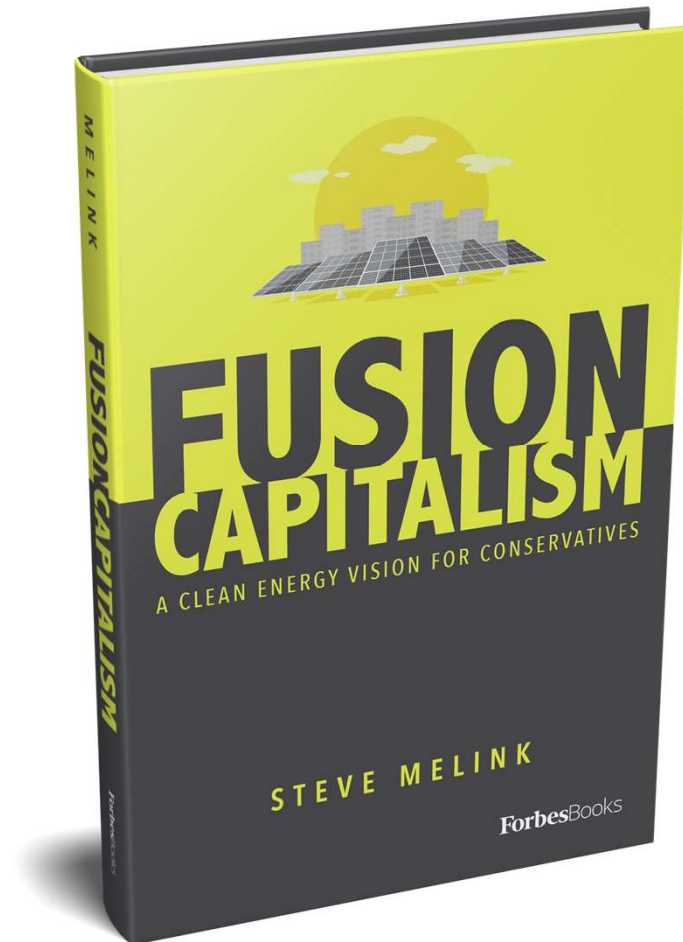
# **Eliminate Building & Transportation Carbon Footprint**

- Switch from Gas RTUs to Electric HP**
- Switch from Gas to Electric Water Heater**
- Switch from ICE Cars/Trucks to EVs**
- Install Solar PV - Roof, Ground, Parking**

# Melink Sustainability Leadership

- **Mainstream NZE Buildings**
- **Solar PV & Super Geo**
- **EV & EV Chargers**
- **Intelligent ERV/DOA**
- **Intelligent Shade Control**
- **Electrify Buildings & Transportation**

# Upcoming Book



















































**Melink**

CLEANTECH PARK

***“Let’s Mainstream NZE Buildings & Decarbonize  
the World – Together, Starting Today”***

**Thank You**

***Steve Melink  
CEO, Melink Corporation***





## CDFA-Bricker PACE Webinar Series: Focusing on Sustainability Using PACE

### Audience Questions

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# Questions?

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### Upcoming Events

**CDFA Virtual Summer School**  
August 3-13, 2020  
All-Online @ [www.cdfa.net](http://www.cdfa.net) **REGISTER TODAY**

The banner features a background image of a laptop keyboard and a yellow folder with two metal prongs. The CDFA logo is positioned on the left side of the banner, and the event title and dates are prominently displayed on the right.

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#### **CDFA Federal Financing Webinar Series: Federal Recovery Resources from the EPA**

July 17, 2020

#### **CDFA // BNY Mellon Development Finance Webcast Series: Financing Small Business Recovery After Covid-19**

July 21, 2020

**Register online at [www.cdfa.net](http://www.cdfa.net)**



# CDFA-Bricker PACE Webinar Series: Focusing on Sustainability Using PACE

## Upcoming Events



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### Next in this Series:

#### **CDFA-Bricker PACE Webinar Series: Policy and the Future of PACE**

August 25, 2020, 11:00 – 1:00 PM Eastern

**Register online at [www.cdfa.net](http://www.cdfa.net)**





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