



COMMERCIAL PACE **Driving Local Economic** **Development**

Virginia Clean Energy Summit
September 17, 2019



What is MAPA?



The Mid-Atlantic PACE Alliance (MAPA) is a regional partnership to advance property assessed clean energy financing solutions. MAPA is supported by a grant from the US Department of Energy.

www.pacealliance.org

“Local governments love PACE because it’s an Economic Development initiative that lowers the cost of doing business in their community. It encourages new business owners to invest in the area, and creates jobs using the local workforce.

PACE projects also have a positive impact of air quality, creating healthier, more livable neighborhoods.”

BENEFITS OF C-PACE

Advances sustainability by benefitting the environment, economy and local workforce:

- Create local jobs for contractors and lenders*
- Lower the cost of doing business and free up capital for business operator to use for other priorities
- Building stock is maintained and upgraded for efficient operation and comfort; longer financing terms allow for “deeper” retrofits
- Reduce greenhouse gas emissions, improve air quality, facilitate storm water management to reduce runoff

* 13,305 *Jobs created*; source: www.PaceNation.us

C-PACE Project Scale & Scope

*C-PACE improvement type
breakdown*

(By \$ funded)

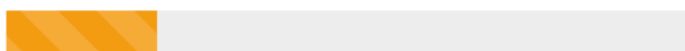
Energy Efficiency only (49%)



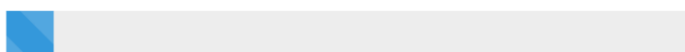
Renewable energy only (23%)



Mixed (22%)

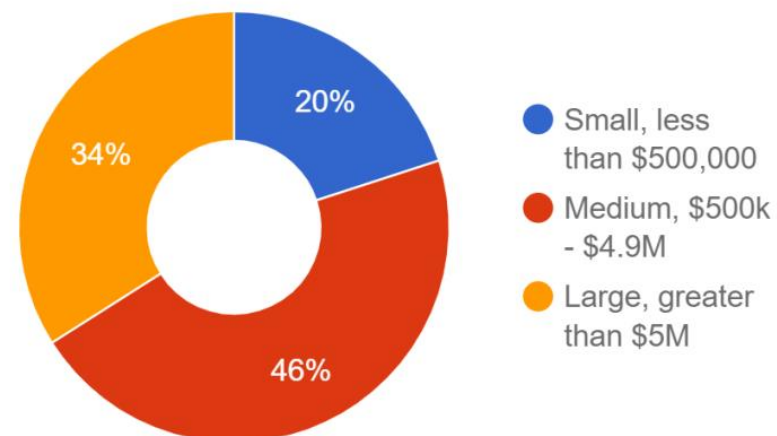


Resiliency only (7%)



C-PACE projects by amount financed

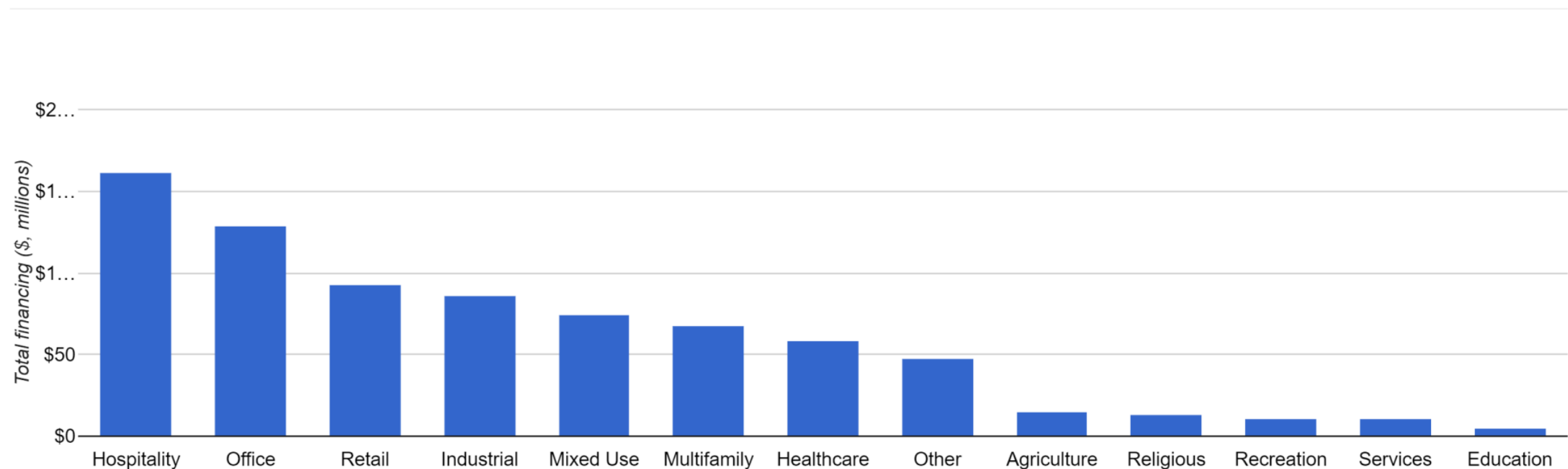
(By \$ funded)



CSPACE Finances Small and Large Projects

C-PACE dollars funded by building type

(By \$ funded)



Source: www.PaceNation.us

CASE STUDY:

Main Street Business



PROJECT OVERVIEW

PROPERTY TYPE:
Small Commercial Retail

INSTALLED MEASURES:
High Efficiency Windows, HVAC System



\$134,408
Approved PACE
Financing



20 Years
Term



Greenworks Lending
Lender



Havetech
Project Partner



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To learn more about MD PACE:
md-pace.com
info@md-pace.com

CASE STUDY:

FINISHING TOUCH

A CHESTERTOWN SHOP



THE CHALLENGE:

The Finishing Touch, a custom frame and print boutique in downtown Chestertown, MD, had air conditioners and windows that dated back to 1978. These outdated HVAC systems were inefficient and expensive to operate.

THE SOLUTION:

The Chestertown retail shop worked with MD-PACE to deploy \$134,408 of C-PACE financing toward HVAC upgrades, and the replacement of more than 1,000 square feet of low R-value glass. The retrofits improved the building's overall energy efficiency, year-round. The building is expected to save approximately \$7,000 in the first year, and \$300,704 in lifetime savings.



ABOUT MD-PACE

MD-PACE is a statewide partnership between PACE Financial Servicing and the Maryland Clean Energy Center to build a statewide commercial Property Assessed Clean Energy (C-PACE) program.



CASE STUDY:

Historic Preservation & Adaptive Reuse



PROJECT OVERVIEW

PROPERTY TYPE:
Mixed-Use

INSTALLED MEASURES:
Automated Building and HVAC Controls, Building Enclosure/Envelope Improvements, Water Conservation Measures, Lighting Replacements



25 Years
Term



Greenworks Lending
Lender



GL Capital
Project Partner



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CASE STUDY:

BROWN'S ARCADE

HISTORIC PRESERVATION & ADAPTIVE REUSE



THE CHALLENGE:

Brown's Arcade is a mixed-use property encompassing retail and business offices. It was constructed in the early 19th century and is listed on the National Registry of Historic Places. The project aims to restore the first floor retail units with new facades and reactivate the inner arcade space with new retail concepts, modern finishings and communal activities. GL Capital will convert the existing offices located on the second and third floor into modern and charming multifamily apartments that will blend in with the historic character of the building. As the last known structure of its kind in the state, preserving the integrity of Brown's Arcade as part of the change in use is imperative.

THE SOLUTION:

According to Kelvin Fu, a Partner at GL Capital, C-PACE was used "to reposition and transform this historic building in downtown Baltimore. This is our first-time utilizing C-PACE and we are delighted to have this building take part in such an extensive improvement, as it will function more efficiently, and allow for a cleaner, healthier environment for our tenants and the local community."



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CASE STUDY:

Multi- Family Housing



PROJECT OVERVIEW

PROPERTY TYPE:
Multi-Family Housing

INSTALLED MEASURES:
High Efficiency Boiler Replacement



\$4,816,131
Approved PACE
Financing



20 Years
Term



Greenworks Lending
Lender



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To learn more about
Montgomery County PACE:
info@paceservicing.com

CASE STUDY:

MULTI-FAMILY RE-DEVELOPMENT



THE CHALLENGE:

A multi-family property management firm needed to replace obsolete boilers in 11 tenant-occupied buildings across state/district borders of Maryland and Washington, D.C., before the winter season.

THE SOLUTION:

The project owner worked with MD-PACE to integrate \$4,816,131 of C-PACE financing into the properties to replace the old boilers with high efficiency boilers. The buildings, together, are expected to save \$843,258 in the first year, and \$3,767,263 in lifetime savings.



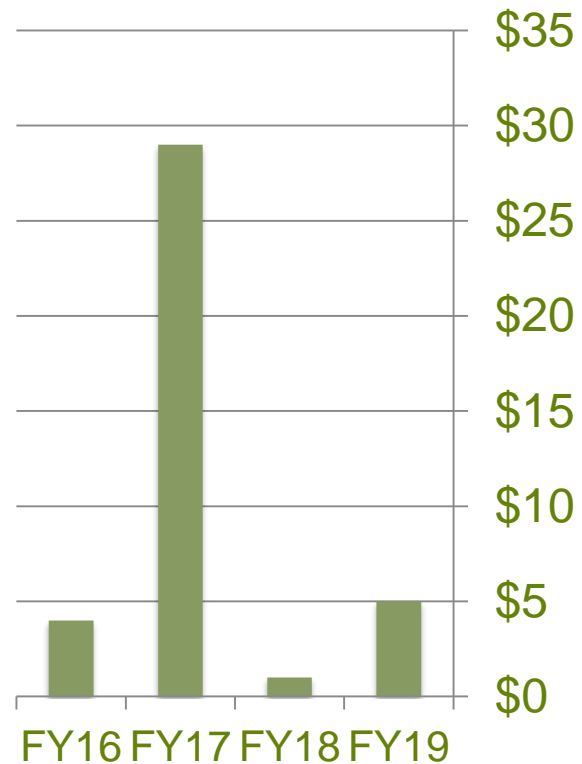
ABOUT MONTGOMERY COUNTY PACE

Montgomery County PACE is a Department of Environmental Protection C-PACE program administered by PACE Financial Servicing. C-PACE authorizes property owners to make energy efficiency and renewable energy upgrades to commercial buildings using innovative financing.

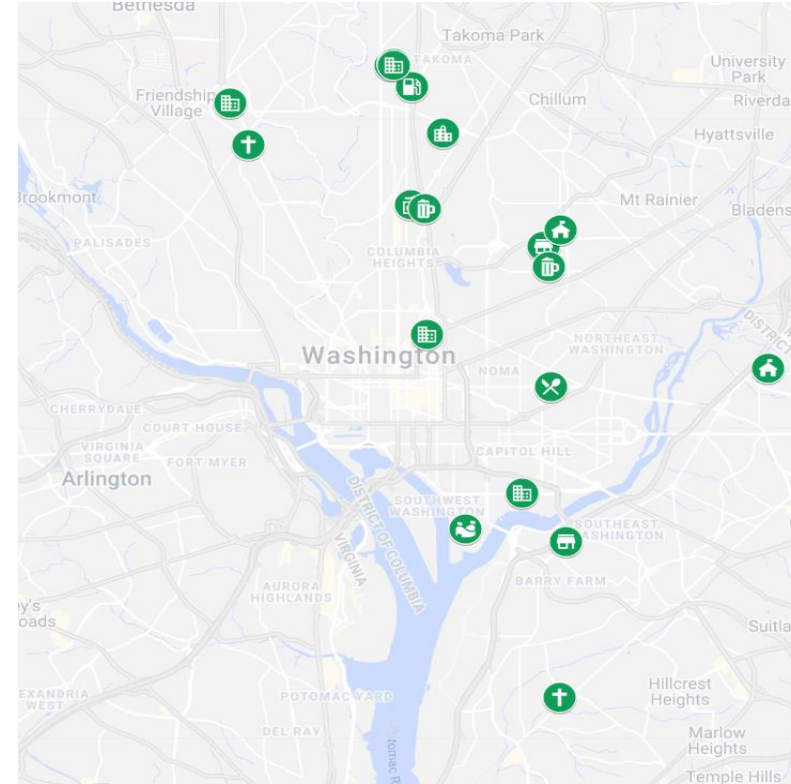


DC MARKET OVERVIEW

PACE Closings / Year (Millions)



\$40.5 million in total value



CASE STUDY:

Self Storage Facility



PROJECT OVERVIEW

PROPERTY TYPE:
Commercial

INSTALLED MEASURES:
17,500 square foot green roof with a fully integrated 134 kW solar PV installation on a newly constructed building



\$750,000
PACE Funding



20 Years
Term



United Bank
PACE Lender



\$15,000
Annual net benefit



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URBAN INGENUITY

To learn more about DC PACE:
DCPACE.com
202-796-8925
info@urbaningenuity.com

CASE STUDY:

TAYLOR STREET SELF-STORAGE GREEN ROOF + SOLAR PV



Photo Courtesy: Solar Energy Services, Inc.

THE CHALLENGE:

Property owners in the District are often faced with a challenge if they want to go solar. Rooftop solar helps cut energy costs, provides valuable tax credits, and generates income from Solar Renewable Energy Credits (SRECs). However, many new construction or substantially renovated buildings are also required to meet high stormwater retention standards. Green roofing is often the most viable way for buildings to retain stormwater. This means many developers have to choose: rooftop solar or a green roof?

THE SOLUTION:

Development team Lock 7 and Adler Financial found an innovative way to meet stormwater retention mandates without sacrificing the ability to install solar. The design and installation team of Furbish and Solar Energy Services, Inc. provided an integrated system where green roof material serves as the ballast for the solar panels. The green roof is designed to retain 100% of runoff on-site while the solar PV will produce more than 150,000 kWh annually.

ABOUT URBAN INGENUITY

DC PACE is independently administered by Urban Ingenuity, a District of Columbia clean energy financing company working on behalf of the District Government's Department of Energy & Environment. Urban Ingenuity works on behalf of building owners to structure, underwrite, and fund energy and green building upgrades. Urban Ingenuity has successfully funded millions of dollars of property improvements with DC PACE, and is working nationally to bring clean energy investment to underserved communities.



CASE STUDY:

Sports Stadium



PROJECT OVERVIEW

PROPERTY TYPE:
Stadium

INSTALLED MEASURES:

884 kW Solar System, High Efficiency HVAC Systems, LED Field Lighting, Insulation, Site Stormwater Conservation, Green Roof, Low Flow Water Fixtures



\$25,000,000
Approved PACE
Financing



20 Years
Term



EagleBank
Lender



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CASE STUDY:

D.C. UNITED AUDI FIELD

A STATE-OF-THE-ART GREEN STADIUM



THE CHALLENGE:

Plans for a new 20,000 seat stadium for the D.C. United soccer team required additional investment. DC PACE enabled the team to resolve a financial challenge by enhancing money-saving green measures, including water fixtures, stormwater management, energy efficiency, and solar energy systems.

THE SOLUTION:

D.C. United worked with DC PACE to integrate \$25 million of PACE financing into the \$300 million stadium project. PACE unlocked additional funds to green the stadium to LEED Gold standards, incorporating integrated solar, LED field lighting, and aggressive stormwater management measures. As of June 2017, the project marks the nation's largest PACE financing by a single lender, and the first use of PACE for a stadium project. Improvements are expected to reduce energy use by 25%.



URBAN INGENUITY

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DCPACE.com
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VA EMERGING MARKET OVERVIEW

- **2015:** VA enacted C-PACE enabling legislation
- **In Sept 2019:** 2.8% actual addressable market access*
- **By late 2020:** 22%+ expected addressable market access*

Virginia's emerging market is developing jurisdiction-by-jurisdiction

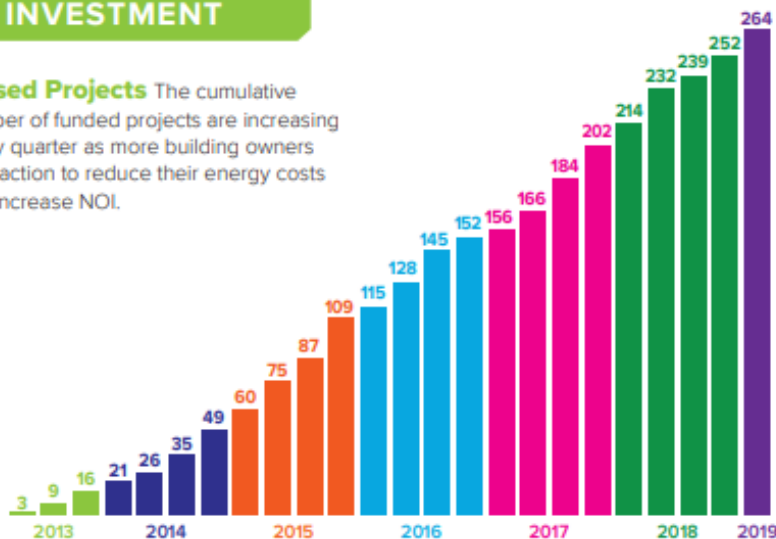
Jurisdiction	Region	Ordinance Enacted	Program Administrator Selected	Program Designed & Launched	Anticipated Public Launch
Arlington	NOVA	✓	✓	✓	Open!
Loudoun	NOVA	✓	✓	In Process	Late 2019
Petersburg	RVA Area	✓	✓	In Process	End 2019/2020
Fredericksburg	NOVA	✓	✓ (self)	In Process	Pending
Fairfax	NOVA	✓	In Process	In Process	End 2019/2020
Alexandria	NOVA	In Process	X	X	Late 2020

* Access to existing building retrofit market

CASE: CT C-PACE IMPACT

INVESTMENT

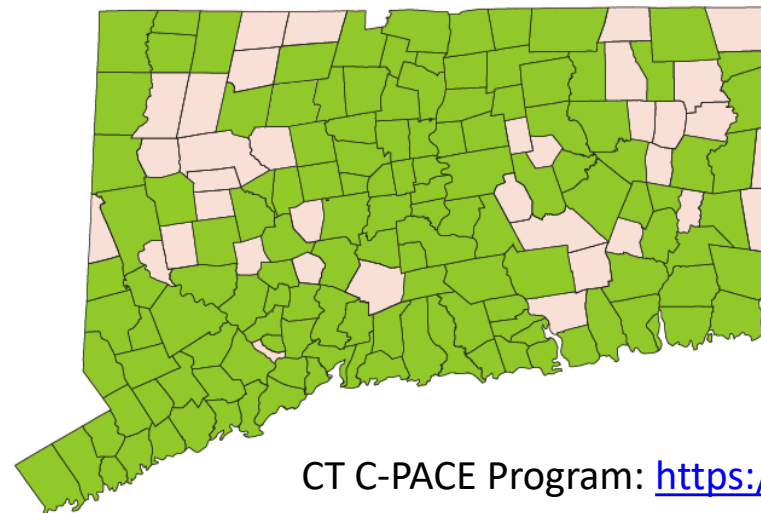
Closed Projects The cumulative number of funded projects are increasing every quarter as more building owners take action to reduce their energy costs and increase NOI.



C-PACE is Growing The total amount of project financing continues to grow as more energy saving projects are closed.

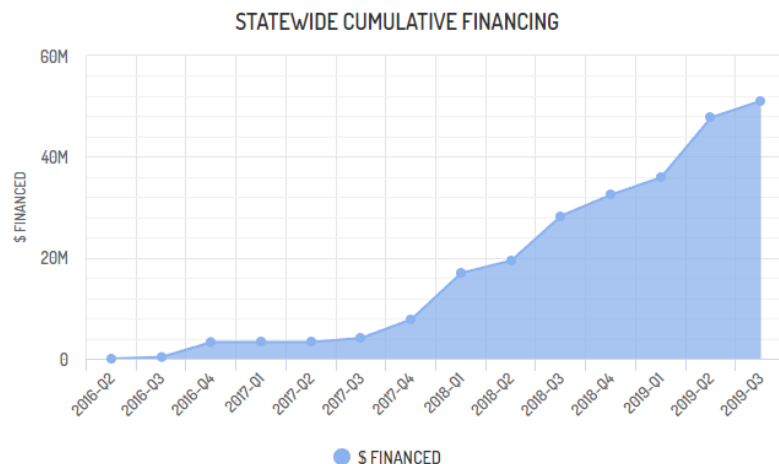


CT C-PACE statewide opt-in model has been active for **7 years**, closed **264 projects** for **\$142+ million** in financing and created **1,500+ jobs!**

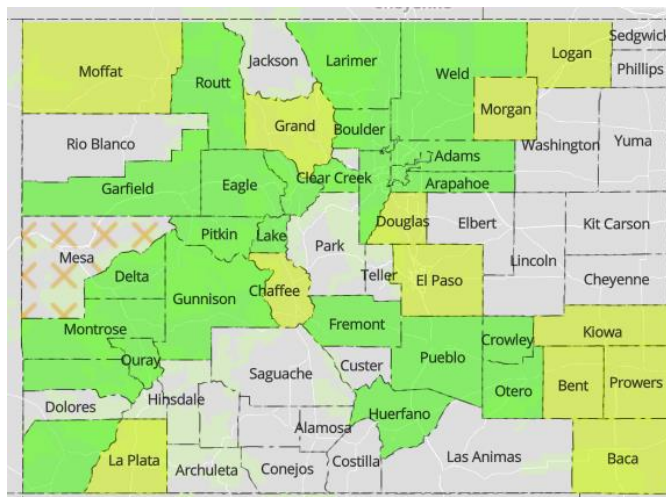


CT C-PACE Program: <https://www.cpace.com/>

CASE: CO C-PACE IMPACT



Statewide C-PACE Metrics	
\$51,071,540	53
Total amount financed	Projects
69,554,656	498
Projected energy savings (kBtu/yr)	Job-years created



CO C-PACE statewide opt-in model has been active for **3 years**, closed **53 projects** for **\$51+ million** in financing and created **498 job-years!**

CO C-PACE Program: <https://copace.com/>



Today's Presenters



Kathy Magruder
Executive Director

MD Clean Energy Center
301-314-6067
ikm@mdcleanenergy.org



Kenley Farmer
Associate Director

**DC Department of Energy
& Environment**
202-671-3314
kenley.farmer@dc.gov



Scott Dicke
Director, Virginia C-PACE Programs

**Sustainable Real Estate Solutions
(SRS)**
703-344-6432
Sdicke@PACEworx.com