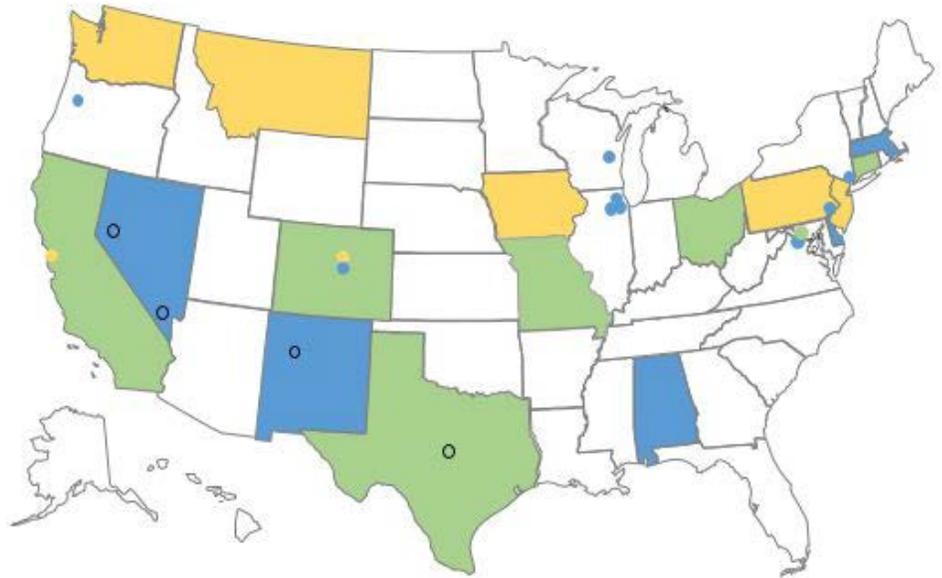


July 2019

Commercial PACE Working Group: Year in Review (2018–2019)

The Commercial Property Assessed Clean Energy (C-PACE) Working Group launched in spring 2018 as a cohort of state and local governments working together to learn about, launch, and refine C-PACE financing programs. **The goal of these efforts is to stimulate \$60 million in C-PACE investments by 2022.** See below to learn about the participants in the C-PACE Working Group; read state and local partner profiles and achievements; and access U.S. Department of Energy (DOE) and other relevant C-PACE resources.

The Year in Review recognizes participants in the C-PACE Working Group; showcases resources and opportunities for all state and local governments interested in learning more about C-PACE; and highlights energy savings and investments the C-PACE Working Group is working to achieve.



32 State and Local Participants

Partners: 17 (5 states, 12 local governments) **Observers:** 7 (5 states, 2 local governments) **Advisors:** 8 (6 states, 2 local governments)

C-PACE Working Group Participants

The C-PACE Working Group includes more than 65 participants across two tracks: (1) the State and Local Track, and (2) the Market Partner Track. These two tracks reflect public-private partnership as the core of C-PACE financing.

The *State and Local Track* includes 32 entities working to launch, refine, or learn about C-PACE programs across the United States (see map above and full list in Table 1). State and local government participants engage with the C-PACE Working Group as one of the following:

- **State and Local Partners** (17 total) are actively seeking to launch or refine C-PACE programs and are making good-faith efforts to achieve significant milestones¹ in the development of their programs;
- **State and Local Observers** (seven total) are exploring C-PACE financing

in their jurisdiction through technical assistance and peer exchange opportunities; and

- **State and Local Advisors** (eight total) have mature programs and serve as advisors to Partners and Observers.

The *Market Partner Track* is made up of 36 organizations, including trade associations, third-party program administrators, capital providers, commercial property developers, contractors, and energy service companies.² Market Partners provide expertise to the C-PACE Working Group.

¹ For a list of milestones the C-PACE Working Group partners are working toward, see the C-PACE Working Group Technical Assistance Overview here: https://www.energy.gov/sites/prod/files/2018/04/f50/C-PACE_Working_Group_TA_Overview_V7.pdf.

² For the C-PACE Working Group web page and a full list of Market Partners, see: <https://www.energy.gov/eere/slsc/commercial-pace-working-group>.

Table 1: State and Local Partners, Observers, and Advisors

Partners	Observers
<ul style="list-style-type: none"> • Arlington County, VA • Bernalillo County, NM • Chicago, IL • Commonwealth of Massachusetts and MassDevelopment • Cook County, IL • Delaware Sustainable Energy Utility • Jefferson County, CO • Las Vegas, NV • Milwaukee, WI • New York, NY & NYCEEC • Philadelphia Energy Authority (Philadelphia, PA) • Prosper Portland (Portland, OR) • Reno, NV • State of Alabama • State of Nevada • State of New Mexico • Will County, IL 	<ul style="list-style-type: none"> • Bay Area Regional Energy Network (State of California) • City of Longmont, CO • Shift Zero Building Alliance (Washington State) • State of Iowa • State of Montana • State of New Jersey • State of Pennsylvania
	<p style="text-align: center;">Advisors</p> <ul style="list-style-type: none"> • California Municipal Finance Authority • Connecticut Green Bank • Dallas, TX • Ohio Port Authorities and Energy Special Improvement Districts • Show Me PACE Clean Energy District (State of Missouri) • State of Colorado • State of Texas–State Energy Conservation Office • Washington, D.C.

State and Local Partners: Commercial Building Stock Profiles and Achievements

Collectively, the total profile attributed to the C-PACE Working Group’s 17 state and local partners³ accounts for 275,000 commercial buildings⁴ across more than 9 billion square feet. Since the start of the Working Group in March 2018, three Partner programs have closed nearly \$11 million in C-PACE financed projects, and all partners have made significant progress toward program launch or another milestone.

Arlington County, Virginia

- **Profile:** 424 multifamily buildings totaling 59,123 units, and 473 other commercial buildings totaling more than 47 million square feet of rentable space.⁵
- **Achievements:** The county’s C-PACE program launched in 2018, and one potential project has advanced through technical review and is eligible for C-PACE, with the property owner currently seeking mortgage-holder consent.

Bernalillo County, New Mexico

- **Profile:** 4,000 commercial buildings, 194 million square feet.
- **Achievements:** The county adopted a C-PACE enabling resolution in late 2018 and in 2019 issued a request for proposals for the services

of a third-party C-PACE program administrator.

Chicago, Illinois

- **Profile:** 17,500 commercial buildings, 1,192 million square feet.
- **Achievements:** In 2018, Chicago adopted a PACE-enabling ordinance and selected a PACE program administrator through an RFP process. Chicago launched their PACE program in the spring of 2019, with over 150 individuals attending the official launch event.⁶

Commonwealth of Massachusetts and MassDevelopment

- **Profile of the three largest cities in Massachusetts:** 5,300 commercial buildings, 427 million square feet.

³ All partners joined the Working Group before March 1, 2019, with the exception of Will County, Illinois (not profiled in this document).

⁴ Unless otherwise noted, partner building count and square footage are calculated using U.S. DOE State and Local Energy Data (SLED) tool estimates, which leverage data from CoStar Reality Information, Inc. Results include only buildings at or above 10,000 square feet. Access the SLED tool here: <https://www.eere.energy.gov/sled/#/>. For state partners, the three largest local governments by population are summed to provide a profile of the commercial building stock.

⁵ Building count and square footage estimate provided by Arlington County. Learn more about Arlington County’s C-PACE Program here: <https://arlington-pace.us/>.

⁶ Learn more about Chicago PACE here: <https://www.chicagopace.org/>.

- **Achievements:** The Commonwealth of Massachusetts adopted C-PACE-enabling legislation in 2016 for a program that MassDevelopment, the statewide C-PACE program administrator, oversees in coordination with the Massachusetts Department of Energy Resources. Through March 2019, MassDevelopment has worked successfully with 15 municipalities to authorize PACE Massachusetts participation.

Cook County, Illinois

- **Profile:** 9,100 commercial buildings, 638 million square feet.⁷
- **Achievements:** In the spring of 2019, Cook County issued a request for proposals to select a third-party program administrator for their C-PACE program.

Delaware Sustainable Energy Utility

- **Profile of the three largest cities in Delaware:** 2,000 commercial buildings, 148 million square feet.
- **Achievements:** The State of Delaware adopted C-PACE-enabling legislation in 2018. In 2019, the Delaware Sustainable Energy Utility, Delaware's statewide program administrator, developed program guidelines.⁸

Jefferson County, Colorado

- **Profile:** 1,900 commercial buildings, 100 million square feet.
- **Achievements:** Jefferson County opted into the statewide C-PACE program in 2016, and six projects totaling approximately \$5.9 million in C-PACE financing have closed in the county as of June 2019. In 2018 and 2019, the county developed and implemented a marketing plan to raise awareness among commercial building owners.

Las Vegas, Nevada

- **Profile:** 6,900 commercial buildings, 591 million square feet.

- **Achievements:** In 2018, Las Vegas adopted a C-PACE enabling resolution, and the city's program will launch in summer 2019.

Milwaukee, Wisconsin

- **Profile:** 4,800 commercial buildings, 285 million square feet.
- **Achievements:** Since its program launch in 2014, Milwaukee has closed more than \$14 million in C-PACE financed projects, including two projects in 2018.⁹

New York City, New York and New York City Energy Efficiency Corporation (NYCEEC)¹⁰

- **Profile:** 200,000 C-PACE eligible buildings, over 4 billion square feet.¹¹
- **Achievements:** In 2019, New York City adopted a C-PACE-enabling ordinance and formed an advisory group to refine its draft program guidelines. New York City's C-PACE program is administered by NYCEEC and is expected to formally launch by the end of 2019.

Philadelphia Energy Authority (Philadelphia, PA)

- **Profile:** 6,800 commercial buildings, 525 million square feet.
- **Achievements:** Beginning in late 2018, the Philadelphia Energy Authority partnered with other organizations and agencies statewide to launch a C-PACE program design process with stakeholders and expects to adopt C-PACE program guidelines in spring 2019.

Prosper Portland (Portland, OR)

- **Profile:** 7,100 commercial buildings, 369 million square feet.
- **Achievements:** In July 2018, Prosper Portland closed the first C-PACE financed project in the State of Oregon. The \$3.5 million project on a historic Portland building includes water and

energy efficiency enhancements, as well as seismic resiliency upgrades.¹² A second C-PACE financed project totaling \$3 million closed in April 2019.

Reno, Nevada

- **Profile:** 1,900 commercial buildings, 136 million square feet.
- **Achievements:** In the spring of 2019, the City of Reno adopted a C-PACE-enabling resolution and began designing their C-PACE program.

State of Alabama

- **Profile of the three largest cities in Alabama:** 6,900 commercial buildings, 400 million square feet.
- **Achievements:** The State of Alabama adopted C-PACE-enabling legislation in 2015. In 2018, the Alabama Department of Economic and Community Affairs began a State Energy Program competitive award project to develop C-PACE programs in the state.

State of Nevada

- **Profile of the three largest cities in Nevada:** 9,900 commercial buildings, 808 million square feet.
- **Achievements:** The State of Nevada adopted C-PACE enabling legislation in 2017. In late 2018, the Nevada Governor's Office of Energy coordinated an education series directed at local governments throughout the state to inform them about C-PACE. There were 25 participants representing 13 different local governments.

State of New Mexico

- **Profile of the three largest cities in New Mexico:** 4,700 commercial buildings, 231 million square feet.
- **Achievements:** The State of New Mexico adopted C-PACE-enabling legislation in 2009, and in the spring of 2019 passed legislation to address gaps in the original enabling legislation.

⁷ Includes all of Cook County except Chicago, which is developing a separate C-PACE program. Cook County's building count and square footage come from DOE's SLED tool v2.0 (under development), which leverages data from CoStar Reality Information, Inc. Results include only buildings at or above 10,000 square feet.

⁸ Learn more about Energize Delaware C-PACE here: <https://www.delawarepace.org/>.

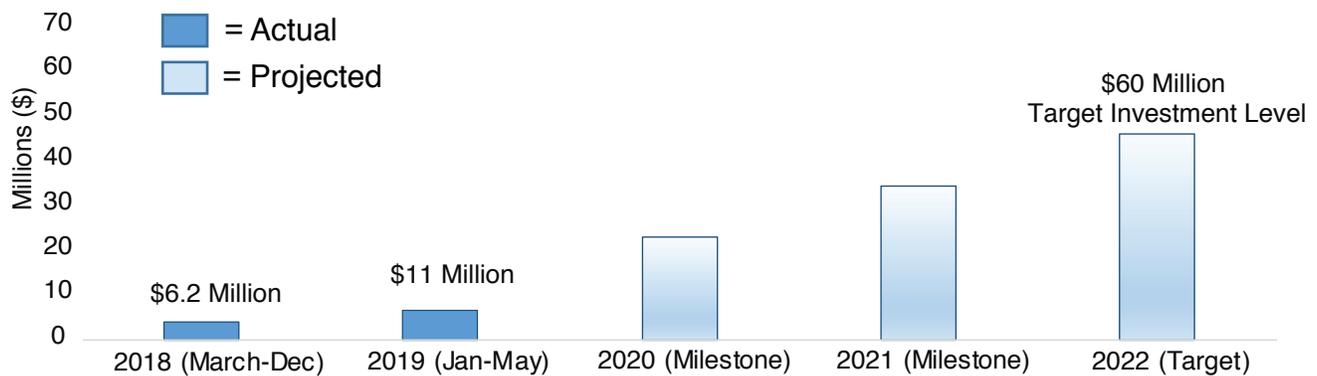
⁹ Learn more about Milwaukee's C-PACE financed projects here: <https://city.milwaukee.gov/bbc/services/PACE-Financing>.

¹⁰ Learn more here: <https://www.nyceec.com/>.

¹¹ Building count and square footage estimate provided by NYCEEC and New York City.

¹² Learn more about Portland's first C-PACE-financed project here: <http://www.propertyfitoregon.com/add-news-here/2019/1/8prosper-portland-closes-first-pace-financing-in-oregon>.

Targeted C-PACE-Financed Projects Across 17+ State and Local Partners, Cumulative 2018-2022 (Millions \$)



State and Local Partners: Energy Investments and Impacts

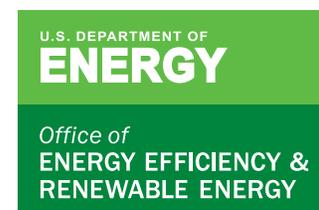
Since the launch of the Working Group in March 2018, three partner programs have closed nearly **\$11 million in C-PACE financed projects**. By the end of 2019, at least seven partners are anticipated to have programs with closed projects. With an investment of \$60 million across more than 17 state and local partner jurisdictions by 2022, the C-PACE Working Group will achieve an estimated impact of **850,000 MWh in energy savings** over the life of the technology and **9 MW of new installed solar capacity**.¹³

Resources

Learn more about the DOE C-PACE Working Group and C-PACE through the following resources:

- **DOE Commercial PACE Working Group**—learn more at: <https://www.energy.gov/eere/slsc/commercial-pace-working-group>.
- **Lessons in Commercial PACE Leadership: The Path from Legislation to Launch**—Lawrence Berkeley National Laboratory and DOE (2018). Available at: <https://www.energy.gov/eere/slsc/downloads/lessons-commercial-pace-leadership-path-legislation-launch>.
- **C-PACE Financing and Tax Assessments: Understanding Roles and Managing Risks for Local Governments**—Lawrence Berkeley National Laboratory and DOE (2019). Available at: <https://energy.gov/eere/slsc/downloads/commercial-pace-financing-and-special-assessment-process-understanding-roles-and>.
- **Accelerating the Commercial PACE Market: Statewide Programs and State Energy Office Participation in PACE Financing**—National Association of State Energy Officials (2016). Available at: http://naseo.org/data/sites/1/documents/publications/CLEAN_Master%20NASEO%20PACE%20Memo%202016-5-18%20FINAL.pdf.
- **PACENation**—Includes the latest market data, case studies of C-PACE projects, and additional resources targeted at an audience of state and local governments. Learn more at: <https://pacenation.us/>.

Questions? Learn more at: <https://www.energy.gov/eere/slsc/property-assessed-clean-energy-programs>
Or contact: stateandlocal@ee.doe.gov ■



¹³ Estimated energy outcomes for C-PACE Working Group deduced from national historic trends on energy efficiency and renewable energy C-PACE investments (by dollar) and anticipated outcomes using PACENation's 2017 C-PACE Economic, Energy, and Environmental Impact Report. See here: <https://pacenation.us/c-pace-annual-impact-report/>.

For more information, visit:
[energy.gov/eere/slsc](https://www.energy.gov/eere/slsc)

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