



Energize NY PACE

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LIFE

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Energy
Improvement
Corporation



NYSERDA
Supported

EIC is a not-for-profit, Local Development Corporation

- Mission to increase clean energy adoption across NYS
- Controlled by member municipalities; shared service model
- Funded by NYSERDA, US-DOE, revenue from services
- Services for EIC Members and their Property Owners:
 - Energize NY PACE- Provides Capital
 - Energize NY Commercial- Support and Guidance
 - Energize NY Residential- Support and Guidance

Wasted Energy in Buildings



New Yorkers spend \$35 billion annually on energy in buildings

- \$10.5 billion is **wasted***
- Commercial property owners want to stop wasting \$\$.
- Why don't they?

*Extrapolated from "Energy Efficiency and Renewable Energy Potential Study of New York State," NYSERDA, April 2014



Photo credit Egonomik.com cin-hava-kirliligi1

The Energy Upgrade Problem



Property owners need:

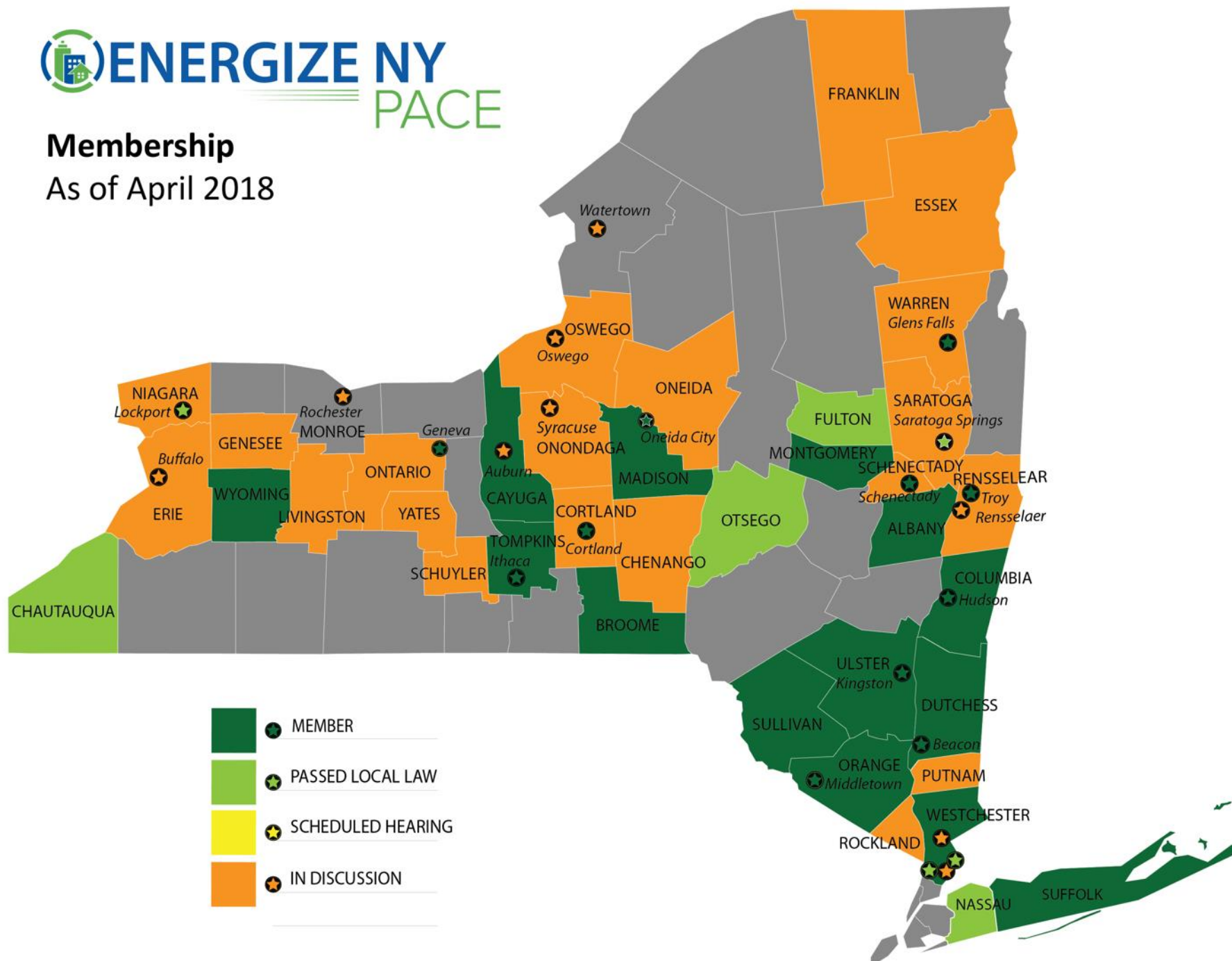
1. Access to capital
2. Help getting started with clean energy projects
3. Advice if they get stuck in the process





Membership

As of April 2018





Traditional Public Benefits:

Services authorized by local municipalities to achieve a defined public benefit:

- Water + Sewer Infrastructure = *Health + Economic Vitality*
- Fire and Police = *Safety*
- Sidewalks + Roads = *Safety + Economic Vitality*
- Public Lighting = *Safety*

Clean Energy Public Benefits

Property Assessed Clean Energy (PACE)



By Darwinek [\[CC BY-SA 3.0\]](#), via Wikimedia Commons

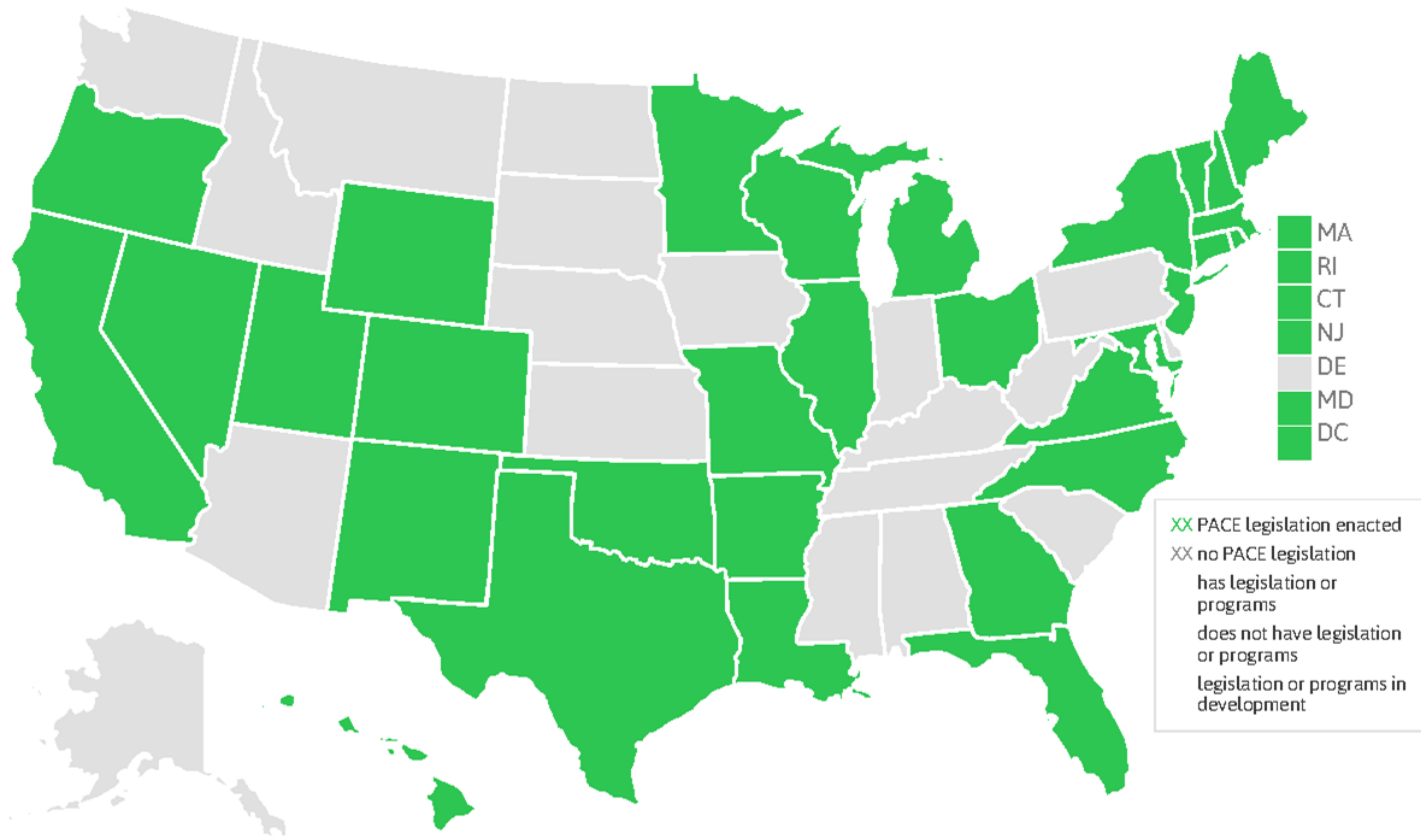
“Municipalities would fulfill an important public purpose by providing financing to property owners for the installation of renewable energy systems & energy efficiency measures.”

- Article 5L of the NYS General Municipal Law

- Repayments collected by municipality via tax bill charge

PACE is Nationwide

Property Assessed Clean Energy Finance



PACE is Nationwide

Property Assessed Clean Energy Finance



C-PACE OVERVIEW

\$583

Millions

1230

Commercial projects

R-PACE OVERVIEW

\$4,890

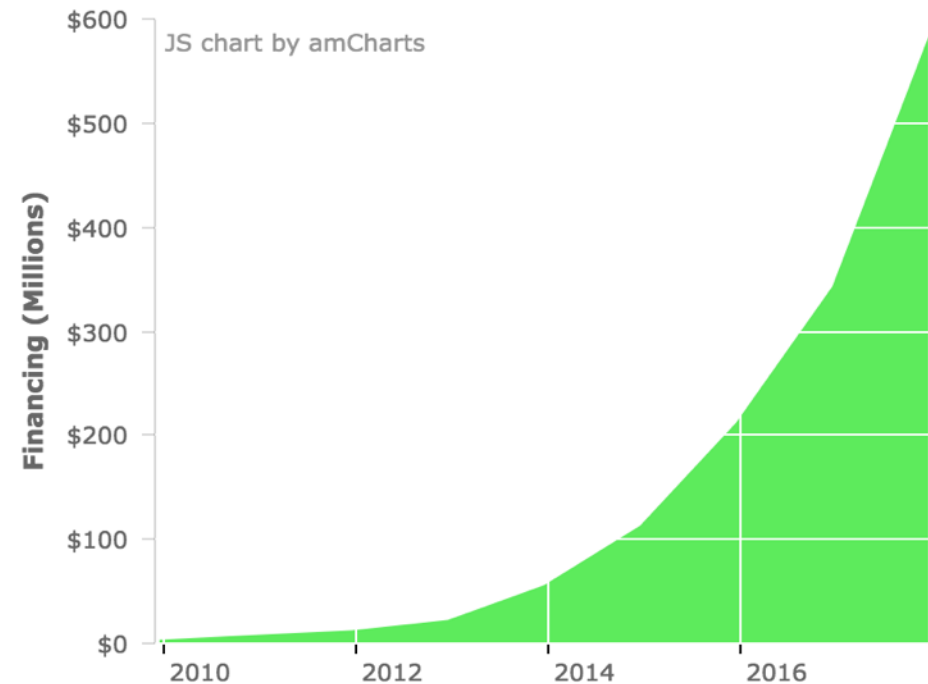
Millions

203,000

Home upgrades

Cumulative C-PACE Financing

2010-2017



Energize NY PACE

Benefits



Property Assessed Clean Energy (PACE) = alternative, affordable financing

- **Up to 100% of the cost** of solar and energy efficiency projects of all sizes
- Eligibility is **not based on traditional credit metrics**, but on the building's ability to carry the extra tax charge and generate savings from the improvements
- Is **repaid through an annual charge on the tax bill** for the property over the term of the loan
- **Automatically transfers to new owner** if the property is sold
- Flexible customizable loan **terms up from 5 - 20 years**
- **Competitive interest rates (5.75% to 6.75%)*** depending upon market conditions

Eligible Building Types



Commercially-owned buildings



- Multifamily
- Healthcare
- Hospitality
- Industrial
- Warehouse
- Not-for-profit
- Office
- Retail
- Agricultural
- Institutional
- Private colleges

Eligible Improvements

- **Renewables:** Solar PV, Solar Thermal, Wind, Energy Storage, Ground/Air Source Heat Pumps, Anaerobic Digester, Fuel Cells, Wood Heating (*New + Existing Buildings*)
- **Combined Heat and Power (CHP)** (*New + Existing Buildings*)
- **Efficiency:** Lighting, Boiler Conversions, Furnace Upgrades, Insulation, HVAC, Chillers, Windows, Pumps, Smart Controls (*Existing Buildings and Substantial Renovations*)



PACE Pairs with Clean Energy Initiatives



Property Assessed Clean Energy (PACE) pairs well with:

- ✓ **Utility Programs** – \$100mm+ of annual incentives related to electricity and gas efficiency improvements, demand management, small business,
- ✓ **NYSERDA Programs, Efficiency:** Financial Assistance related to geo thermal, agriculture, new construction, multi family, commercial and demand management programs
- ✓ **NYSERDA Programs, Renewables** – Financial Assistance for solar (NY Sun), wind and storage (soon)
- ✓ **Empire State Development** - economic development agency of NY initiatives provide assistance specifically for building revitalizations in the urban core sections of NY State that can include energy improvements.

The Energy Upgrade Problem:

Property owners need:

- ✓ Access to capital
- 1. Help getting started
- 2. Help if they get stuck



Energize NY Commercial



Provide guidance to property owners

- Identify and connect resources
- Application support

Support to service providers

- Energize NY PACE Trainings
- Project modeling
- Application support

Industry resource

- NYSERDA – Utilities – Trade associations

The Energy Upgrade ~~Problem~~ Solution: Energize NY

Property owners receive

- ✓ Access to capital
- ✓ Help getting started
- ✓ Help if they get stuck



After: Energized!

PACE + Affordable Multi-Family Housing:



Challenges:

- Poor credit and/or limited access to capital
- Capital too expensive
- Deferred investments in building
- High maintenance, energy costs
- Lack of capacity and expertise to focus on energy

Opportunities with Clean Energy Improvements + PACE

- Reduce and fix energy costs
- Lower maintenance costs
- Improve health, comfort + livability of residents
- Improve the surrounding community w/lower pollution, lower energy costs, higher property values

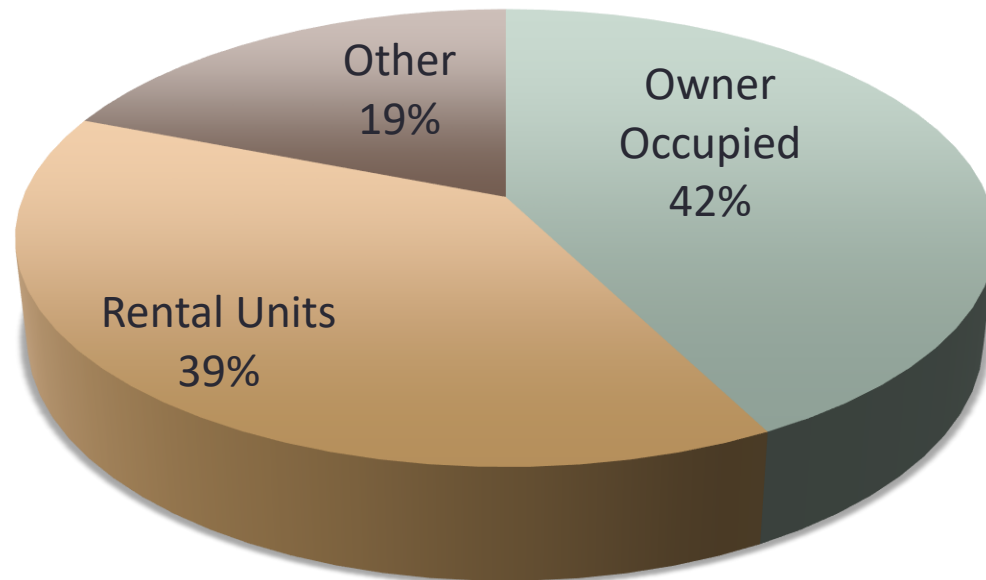
Energy Costs and Low Income Residents



The energy burden for low income households in the Northeast is 29%, compared to 3% for middle-to-higher-income households.

*****NYSERDA***

Housing Stock in Westchester County



Average Median Income of Families that are renters in Westchester County is \$49k or 54% below the County AMI *Westchester County

Subsidized Housing w/o HUD - Peekskill, NY



The Challenge: Drum Hill was facing a \$50,000+ repair to its boiler and needed to upgrade its heating, cooling and lighting systems to better serve its elderly residents.



The Solution: 20-year PACE financing combined with QECBs at 3.14% interest with no upfront costs and no need to tap Drum Hill's credit lines. The project comprehensively addressed aging infrastructure and maintenance issues.

Subsidized Housing w/o HUD – Peekskill, NY



Drum Hill Senior Living, Peekskill



Project

- 🏢 Senior Living Facility, 122,018 sq.ft.
- ⚙️ Efficiency Project
- 💰 \$600/yr average annual cash flow
- 🌿 14% Electric Use Offset
- 🌿 10% Natural Gas Savings

Financing

Amount Financed: \$429,000
Term: 20 years
Interest Rate: 3.14%*
Financing Cost: \$29,000/yr
Completion Date: December 2016
*QECB Enhanced Rate

Lead

Former municipal official Identified this project

Scope of Work

- Boilers
- Chillers
- VFD Pumps
- Lighting

Duration

8 months from start to finish

Subsidized Housing – *North Salem, NY*



The Challenge: AHOME, a non-profit owner of affordable housing, realized energy improvements would cut energy costs. Finding project financing was a challenge even though project would pay for itself.



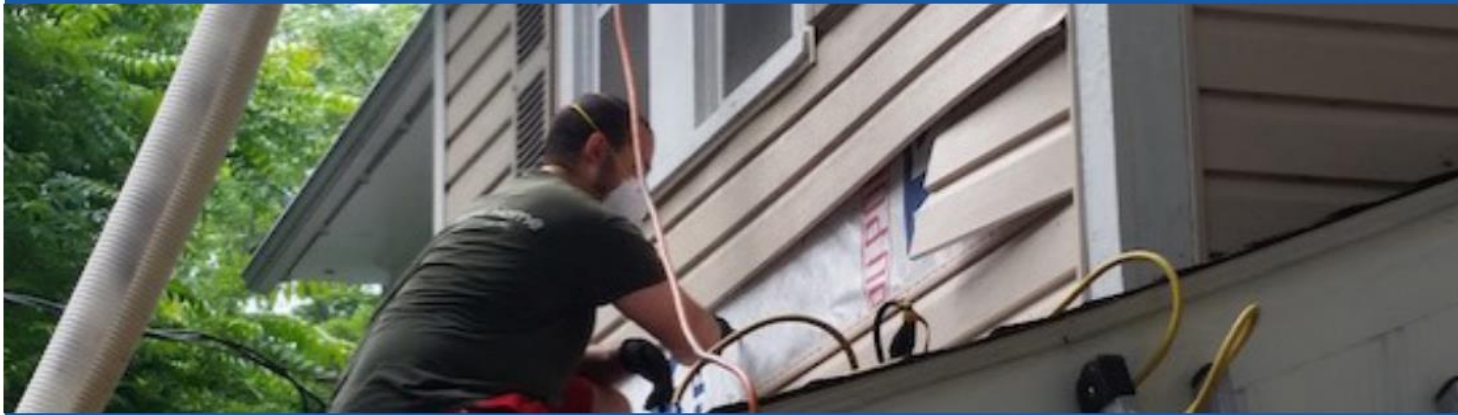
The Solution: ENERGIZE NY PACE QECB financing AT 2.94% was approved based on the property's value and the energy savings potential and did not depend upon the size of the non-profit's balance sheet.



Subsidized Housing – North Salem, NY



Robson House, North Salem



Project



Multifamily, 3,816 sq.ft.



Efficiency Project



\$1,050/yr average annual cash flow



31% Energy savings

Financing

Amount Financed: \$25,258

Term: 15 years

Interest Rate: 2.94%*

Financing Cost: \$2,100/yr

Completion Date: July 2015

*QECB Enhanced Rate

Lead

Energize NY
Qualified
Partner

Scope of Work

Home
Performance
upgrade

Duration

6 months
from start to
finish

Naturally Occurring AH – *Mt Vernon, NY*



The Challenge: Conversion from old, inefficient oil fired heating / hot water system

The Solution: NYSERDA MPP/MPP Partner with comprehensive building performance solutions paired with Energize NY PACE

- allowed for deeper upgrade.



Naturally Occurring AH – *Mt Vernon, NY*



NatLew, Mount Vernon







Lead

NYSERDA
Multifamily
Partner Customer

Scope of Work

- Fuel conversion
- Boiler
- Hot water heater
- Pipe insulation
- Lighting
- Windows

Project

-  Multifamily, 20,000 sq.ft.
-  Efficiency Project
-  \$19,200/yr average annual cash flow
-  14% energy savings

Financing

Amount Financed: \$238,078
Term: 20 years
Interest Rate: 6.08%
Financing Cost: \$20,700/yr
Completion Date: March 2017

PACE Finance + Solar PPA=
Best of Both for Peekskill Nonprofit



UA21 Steamfitters Union PPA

The Pre Paid PPA Structure - System Size 35,400 watts

▪ Base System Cost:	\$ 141,700
▪ NYSERDA NY Sun Incentives:	\$ 28,320
▪ Closing Costs (Fee, Appraisal, Title Search)	\$ 6,441
▪ Total Net Cost:	\$ 119,851
▪ PPA Owner Equity Contribution	\$ 43,410
▪ Energize NY PACE (Pre-Paid PPA)	\$ 76,441
✓ <i>Value of Annual Solar Production:</i>	<i>\$ 8,267</i>
▪ Annual PACE Tax Charge	\$ 6,264
✓ <u>Gross Cash Flow to Owner:</u>	<u>\$ 2,003</u>

The Alternative - Outright ownership

▪ Total Net Cost:	\$ 119,851
▪ Investment Tax Credit:	\$ 0
▪ Depreciation Tax Credit	\$ 0
▪ Energize NY PACE	\$ 119,851
▪ <i>Value Solar Production:</i>	<i>\$ 8,267</i>
▪ PACE Tax Charge	\$ 9,756
▪ Annual Cash Flow:	\$ -1,489

PACE in Larger Multi Family Projects



Lowers Cost of Funds: PACE has lower origination costs than mezzanine and/or equity capital.

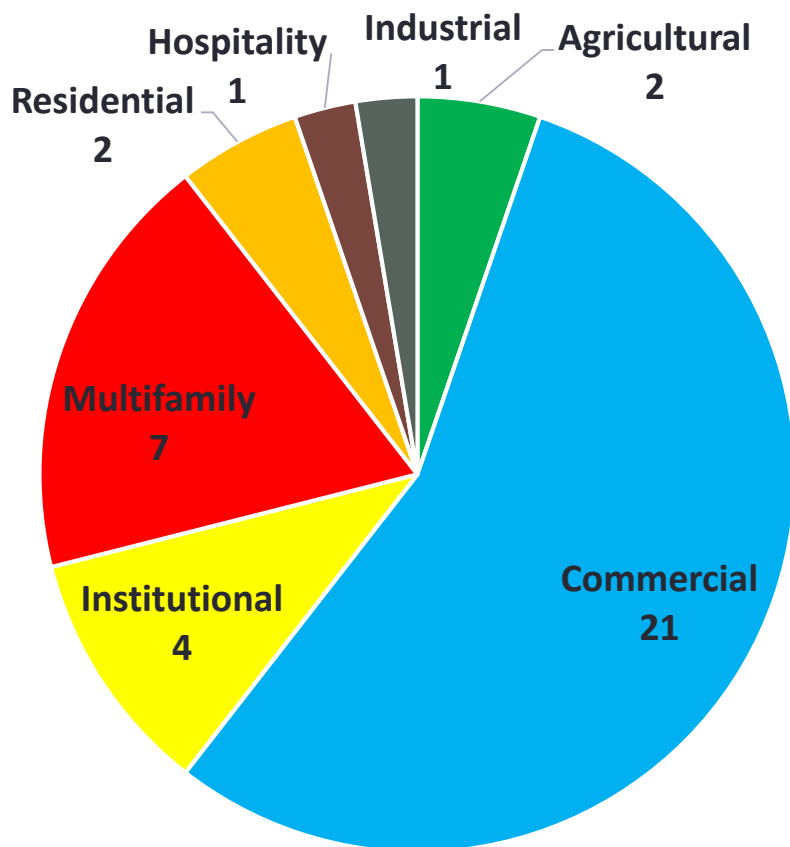
Less Need for Equity/Mezzanine Capital: PACE provides a long term, fixed rate payback period.

Tax Bill Charge Repayment - Off balance sheet

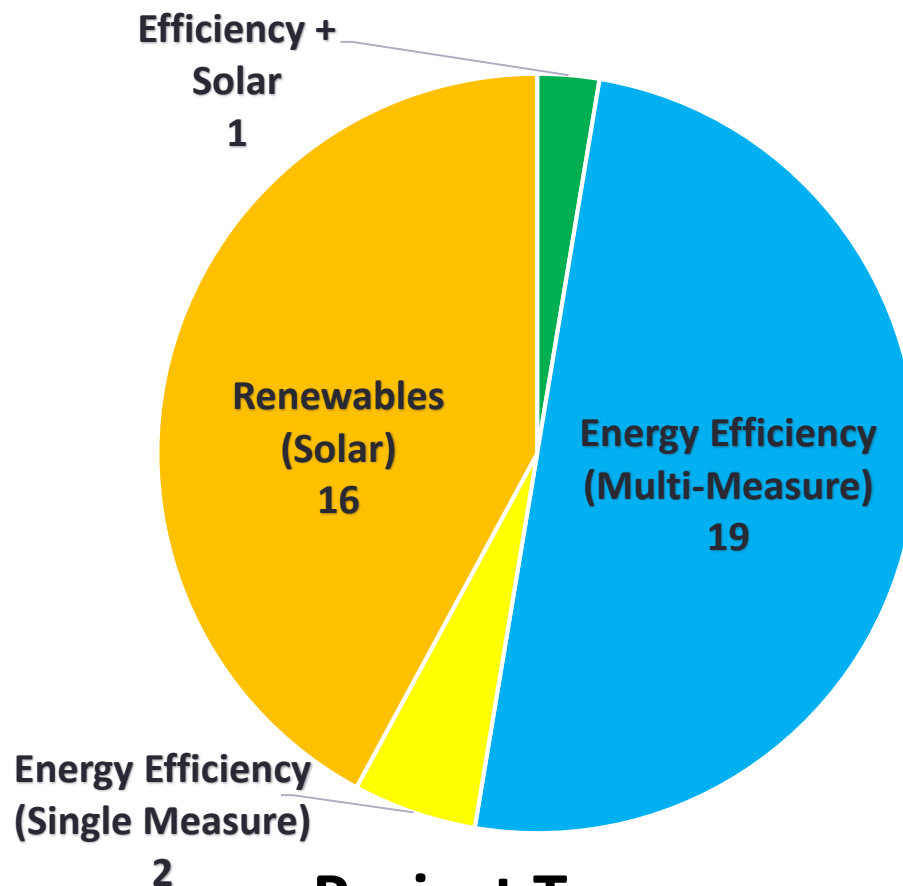
Supports Deeper Efficiency and Renewable Energy Projects: energy efficient/renewable energy projects which may generally be affordable

Energize NY Commercial

Type of Improvements



Property Type



Project Type

Energize NY PACE 2.0



Key changes:

- New 35% Loan to Value cap
- Construction Phase PACE
- All NYS Municipalities can participate and offer PACE
- Project Developers can use EIC Capital or bring their own

NEW Products:

- Community Solar?
- Residential PACE?
- Retrofit NY PACE?

Energize NY + NYS's Clean Energy Goals



REV Clean Energy Goals for 2030

ny.gov/REV4NY

40% **Reduction**
in greenhouse gas emissions from 1990 levels

50% **Generation**
of New York State's electricity must come from renewable energy sources

23% **Decrease**
in energy consumption of buildings from 2012 levels



Energize NY + NYS's Clean Energy Potential



Top 33 Counties and Cities represent:

80% of population (ex NYC)

30-80% of all buildings in Commercial, Multi-Fam, Ag

\$966 Billion of Assessed Value:

Energize NY PACE Potential (*20% LTV):

\$193 Billion of Clean Energy Capital

QUESTIONS?



Q+A
?

Contact information



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Energize NY PACE Criteria

- Improvements have savings-to-investment ratio > 1
- Financing capped at 35% of value of benefitted property
- Property's total loan-to-value is no greater than 90%
- No bankruptcy within last 7 years
- 3 Year history of timely property tax payments
- No mortgage or other property related defaults
- Existing mortgage holder consent required
- NYSERDA/Utility/C-PACE Guidelines approved energy assessments and upgrade process

NYS PACE Technical Criteria



NYSERDA Commercial-PACE Guidance: Three Pathways

1) NYSERDA Programs

- a) NYSERDA programs for energy audits and/or feasibility standards

2) Utility and LIPA incentive programs

- a) Pre-qualified and custom incentives for electricity and gas savings

3) NY State Commercial (C-PACE) Guidelines

- a) Third-Party Certifying Entities – Approved by NYSERDA to certify energy audit firms
- b) NYSERDA-approved professional firms can undertake audits for PACE

Savings Criteria includes societal benefits: health, greenhouse gas emissions reductions, or other environmental benefits.