Energize NY PACE
Mark Thielking – Executive Director
LIFE
May 22, 2018
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?

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

- **MEMBER**
- **PASSED LOCAL LAW**
- **SCHEDULED HEARING**
- **IN DISCUSSION**
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)

“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

[Map showing states with PACE legislation or programs vs. those without, indicating nationwide adoption of PACE programs through legislation or program development.]
# PACE is Nationwide

Property Assessed Clean Energy Finance

<table>
<thead>
<tr>
<th>C-PACE OVERVIEW</th>
<th>R-PACE OVERVIEW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>$583</strong> Millions</td>
<td><strong>$4,890</strong> Millions</td>
</tr>
<tr>
<td><strong>1230</strong> Commercial projects</td>
<td><strong>203,000</strong> Home upgrades</td>
</tr>
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*Source PACE Nation*

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**Cumulative C-PACE Financing**

2010-2017

[Graph showing cumulative financing from 2010 to 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

*Rates as of 5-09-2018
Eligible Building Types

Commercially-owned buildings

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


• **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**

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

*Westchester County*
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

<table>
<thead>
<tr>
<th>Project</th>
<th>Financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Living Facility, 122,018 sq.ft.</td>
<td>Amount Financed: $429,000</td>
</tr>
<tr>
<td>Efficiency Project</td>
<td>Term: 20 years</td>
</tr>
<tr>
<td>$600/yr average annual cash flow</td>
<td>Interest Rate: 3.14%*</td>
</tr>
<tr>
<td>14% Electric Use Offset</td>
<td>Financing Cost: $29,000/yr</td>
</tr>
<tr>
<td>10% Natural Gas Savings</td>
<td>Completion Date: December 2016</td>
</tr>
</tbody>
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### 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

**Scope of Work**
Home Performance upgrade

**Duration**
6 months from start to finish

Lead
Energize NY Qualified Partner
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

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<tr>
<th>NatLew, Mount Vernon</th>
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**Lead**
NYSERDA Multifamily Partner Customer

**Scope of Work**
- Fuel conversion
- Boiler
- Hot water heater
- Pipe insulation
- Lighting
- Windows

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<tr>
<th>Project</th>
<th>Financing</th>
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</thead>
<tbody>
<tr>
<td>Multifamily, 20,000 sq.ft.</td>
<td>Amount Financed: $238,078</td>
</tr>
<tr>
<td>Efficiency Project</td>
<td>Term: 20 years</td>
</tr>
<tr>
<td>$19,200/yr average annual cash flow</td>
<td>Interest Rate: 6.08%</td>
</tr>
<tr>
<td>14% energy savings</td>
<td>Financing Cost: $20,700/yr</td>
</tr>
<tr>
<td></td>
<td>Completion Date: March 2017</td>
</tr>
</tbody>
</table>
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
- **Value of Annual Solar Production:** $8,267
- **Annual PACE Tax Charge:** $6,264
- **Gross Cash Flow to Owner:** $2,003

#### The Alternative - Outright ownership
- **Total Net Cost:** $119,851
- **Investment Tax Credit:** $0
- **Depreciation Tax Credit:** $0
- **Energize NY PACE:** $119,851
- **Value Solar Production:** $8,267
- **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
- Commercial: 21
- Residential: 2
- Multifamily: 7
- Institutional: 4
- Hospitality: 1
- Industrial: 1
- Agricultural: 2

Project Type
- Energy Efficiency (Multi-Measure): 19
- Renewables (Solar): 16
- Efficiency + Solar: 1
- Energy Efficiency (Single Measure): 2
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

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

ny.gov/REV4NY
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

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Contact information

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*Executive Director*

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mark@energizeny.org
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.