Agenda:

Overview:
- CivicPACE: The market opportunity
- Who We Are: Urban Ingenuity & Energize NY

Case Studies:
- HUD Subsidized Public Housing
- Community Based Organizations
- PACE Secured PPA’s
- Credit Enhancements (QECBs, etc.)
- Tax Exempt PACE Financing
What is CivicPACE? – Serving the Community

CivicPACE

The US Department of Energy SunShot Initiative is supporting work to help PACE serve non-profit solar customers...

- Affordable housing
- Houses of Worship
- Charter Schools
- Health Care Facilities
- Higher Ed Campuses
- Non-profit Office

PACE solves key financing challenges for anchor civic institutions...

CIVICPACE.ORG
Non-profits: *Challenges & Opportunities*

**Challenges:**
- Poor Credit / Access to capital
- Aversion to debt / Other Priorities
- Low or no tax appetite
- Complex decision-making
- Incentive for ad hoc projects
- “Headline risk” for underwriters

**Opportunities:**
- Deferred maintenance = Savings
- Interest in new capital structures
- Mission driven
- Focus on OpEx + Cash flow
Urban Ingenuity: Catalyzing PACE Pipeline

- DC Program Administration
- Enterprise National Green Platform
- First PACE in Affordable Housing
- Creative Structuring
  - PACE Secured PPAs
  - HUD Approved Public Housing
  - Tax Exempt PACE Financing
- Engage Many Sources of Capital
- Portfolio Screening & Analytics
- Large District Energy Microgrids
Energy Improvement Corporation (EIC)

Not-for-profit, Local Development Corporation

Owned by Member Municipalities – shared service model

Funded by: NYSERDA, US-DOE, financing revenue

Serve property owners with four programs:

– Energize NY PACE Finance
– Energize NY Commercial
– Energize NY Residential
– Solarize Westchester

Rates: (subject to market conditions)

5 year = 4.25%, 10 year = 4.50%
15 year = 5.00%, 20 year = 5.50%
(QECB: 20YR = < 3%)
Case Study:

HUD Assisted Public Housing
HUD Assisted Case Study: Phyllis Wheatley YWCA

**Project:** Deep rehab of historic property offering transitional housing to homeless women

**Challenges:**
- Install solar and highly efficient equipment
- Pays back, without impacting capital budget
- Approval from many public & private partners

**Solution:** PACE filled a gap in a complex multi-million $ project

Financed 30 kW rooftop solar Efficient HVAC systems, heat recovery system, LED lighting, and low-flow water fixtures
HUD Assisted Case Study: YWCA Project Benefits

- PACE Financing: $635,000 (15 Year Term)
- Tax Equity: $65,000

<table>
<thead>
<tr>
<th>Property Owner: Annual Benefit</th>
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<tbody>
<tr>
<td>Utility savings</td>
<td>$73,000</td>
</tr>
<tr>
<td>PACE Payments</td>
<td>$(66,000)</td>
</tr>
<tr>
<td><strong>Net Cash Flow</strong></td>
<td><strong>$7,000</strong></td>
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<table>
<thead>
<tr>
<th>Equity Investor Benefits</th>
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<tbody>
<tr>
<td>SREC Revenue (pre-tax)</td>
<td>$72,000</td>
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<tr>
<td>ITC</td>
<td>$36,000</td>
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<tr>
<td>Depreciation</td>
<td>$35,500</td>
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<tr>
<td><strong>Total Benefit</strong></td>
<td><strong>$143,500</strong></td>
</tr>
<tr>
<td>Tax Equity</td>
<td>-$65,000</td>
</tr>
<tr>
<td><strong>Net Benefit</strong></td>
<td><strong>$78,500</strong></td>
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</table>

- PACE finances solar PV and efficiency in one package
- Net benefit $7,000 per year in cash flow
- Made infrastructure improvements without raising rents
- First use of PACE financing in a HUD-assisted mixed finance property
- Integrated PACE with LIHTC, DHCD, DCHA & other structures

Project financials simplified for illustrative purposes.
## HUD Assisted Case Study: The Economic Case

<table>
<thead>
<tr>
<th></th>
<th>Self-Funded</th>
<th>PACE</th>
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</thead>
<tbody>
<tr>
<td>Investment by Property Owner</td>
<td>$700,000</td>
<td>$0.00</td>
</tr>
<tr>
<td>Annual Utility Savings</td>
<td>$77,000*</td>
<td>$73,000</td>
</tr>
<tr>
<td>Annual PACE Payment</td>
<td>$0.00</td>
<td>$(66,000)</td>
</tr>
<tr>
<td>*Includes SREC income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net Benefit Year 1</td>
<td>$(623,000)</td>
<td>$7,000</td>
</tr>
<tr>
<td>Annual Net Benefit Years 2-15</td>
<td>$77,000</td>
<td>$7,000</td>
</tr>
<tr>
<td>5-year NPV of Cash Flows (@ 6% discount rate)</td>
<td>$(305,000)</td>
<td>$27,000</td>
</tr>
<tr>
<td>10-year NPV of Cash Flows (@ 6% discount rate)</td>
<td>$(56,000)</td>
<td>$58,000</td>
</tr>
<tr>
<td>5-year IRR</td>
<td>-15%</td>
<td>Infinite</td>
</tr>
<tr>
<td>10-year IRR</td>
<td>3%</td>
<td>Infinite</td>
</tr>
</tbody>
</table>

PACE increases NOI & property value with Zero dollars out-of-pocket for the owner
UI has demonstrated a PACE structure that conforms with HUD-PIH mixed finance requirements for public housing

1. **Inter-Creditor Agreement:**
   i. **PACE Subordination:** to Declaration of Trust (DOT/DORC)
   ii. **Right to Cure:** DCHA may cure any delinquency in payment
   iii. **First Refusal:** In foreclosure DCHA can buy Tax Cert for $1

2. **Declaration of Trust:** Includes language that ownership transfer under PACE is conditioned on observing the DOT/DORC.

3. **Mixed Finance ACC Amendment:** Language references PACE subordination to the DOT/DORC through inter-creditor agreement

4. **Rental Term Sheet:** HUD is approving terms that include PACE financing along with ACC payments within the capital stack
Case Studies:

Community centers, churches, & housing
PROJECT PROFILE: Wainwright House, City of Rye, NY
Energize NY: simple, low-cost, long-term financing for clean energy upgrades

THE PROJECT

Building details:
- 3 buildings, 18487 sq ft
  - Main House (1931)
  - Carriage House (1931)
  - Fonrose House (1951)

Energy efficiency measures:
- Optimize temperature schedule and install new thermostats
- Upgrade lighting to LED and high efficiency T8s and add lighting controls
- Replace domestic hot water heater (DHW) and switch to natural gas
- Install low-flow faucet aerators and showerheads
- Insulate steam piping
- Add insulation, air seal
- Clean and seal ductwork
- Replace cooling equipment
- Replace boiler and convert to natural gas

FINANCED BY

ENERGIZE NY
NY State’s PACE Program

Project cost: $313,866
Incentives: $20,325
(Con Edison total incentives)

Term: 20 years
Interest rate: 6.13%
100% financed, 0 down

Cost of financing: $30,546/yr

Energize NY member: City of Rye

ESTIMATED SAVINGS

Energy savings: $34,471/yr or 1,500 MMbtu (Electric + oil)

Cash flow to owner: $3,926/yr

Project completion date: Estimated March 2016

“This is a capital investment that improves all three buildings, reduces equipment maintenance costs and increases comfort for all occupants. We focused on energy conservation as well as increased efficiency in every possible way—from insulation to equipment to LED lighting. With the availability of financing, it just makes sense for us to control expenses as a not-for-profit.”

--Judy Martin, Wainwright Trustee and energy advisor, Green Home Consulting
PROJECT PROFILE: St. Christopher’s Church, Buchanan, NY

THE PROJECT

Building details
5 buildings
  o Catholic Church
  o Aggregate 181,000 sq ft.

Renewable energy generation
Roof mounted
36 kW solar electric system and roof replacement

ENERGIZE NY™

NY State’s PACE Program

Project cost: $170,000
Incentives:
  NYSERDA: $28,552
Owner Contribution $2,560
Financed amount: $152,900

Term: 20 years
Interest Rate: 3.86%*
*QECB enhanced interest rate

Financing Cost: $11,086/yr
(repaid as charge on annual tax bill)

Energize NY member:
Town of Cortlandt

FINANCED BY

ESTIMATED SAVINGS

Estimated electric use offset: 99.9%
Estimated Annual Average Net Cash flow to owner + $3,496/yr
PROJECT PROFILE: Robson House, Affordable Housing Owned by A-HOME, a not-for-profit

Energize NY: simple, low-cost, long-term financing for clean energy upgrades

THE PROJECT

Building details:
- 1800s building
- 3,816 sq ft
- Multifamily home
- 4 apartments
  (2 senior studios, 2 family apartments)
- Oil heat
- Window AC units

Energy Efficiency Measures
- Air sealing and insulation
  o Exterior walls
  o Rim joists
  o Attic

Project Completed: July 2015

FINANCED BY

ENERGIZE NY™
NY State’s PACE Program

Project cost: $25,717

Incentives: $2,570
(NYSERDA Home Performance with ENERGY STAR incentive)

Amount financed: $25,258

Term: 15 years

Total interest rate: 2.94%*
*Westchester County subsidized interest

ESTIMATED SAVINGS

Energy savings: 31%
(112 MMbtu/yr)

Cash flow to owner: +$1,050/yr

“We are planning to upgrade our other properties, since these projects directly reduce our operating costs and improve our bottom line. We can use the saved dollars for things that are important to us, our programs and the residents we serve.”

-Debbie Haglund, Executive Director; A-HOME
Case Study:

PACE Secured PPA
**Project:** Energy and infrastructure upgrades on four large properties for a prominent church

**Challenges:**
- Monetize tax benefits from solar PV
- Use savings to finance structural work
- Retire traditional mortgage debt

**Solution:**
- $3 million in building upgrades, including solar PACE-secured PPA for 300 kW system, partial roof replacements, HVAC upgrades, smart thermostats & controls, LED lighting, low-flow water fixtures
PACE improves Solar PPA contracting...

A. **PACE is a credit enhancement:** Adds security for investors, reduces default risk, brings more economics into transaction.

B. **PACE simplifies underwriting:** PACE is tied to the asset not the credit of the borrower, simplifying underwriting.

C. **PACE eliminates personal guarantees:** PACE security removes the need for contractor or owner guarantees on debt.

D. **Increases owner benefits:** PACE can structure tax equity investment to maximize PHA cash flows. PACE-Secured PPAs can also revert to PHA (or RAD) ownership.

E. **Third-Party Ownership is not liquidated under RAD**
PACE-Secured PPA: Transaction Structure

**Tax Equity Investor**
- **Returns:** Investor receives tax benefits and SREC income
- **Tax Equity:** Investor provides remainder of upfront install costs to own the system.

**Solar Project**
- **Electricity:** Property owner receives title to all electricity flowing off panels.

**PACE Capital Provider**
- **PACE Note:** Issued by Govt. to capital provider as security for financing energy upgrades.
- **Prepaid Electricity:** PACE ‘prepays’ for electricity produced, covering part of systems cost & offsetting debt or equity requirements
- **Semi-annual payments**

**PACE Program**
- **PACE Assessment:** Property owner consents to PACE assessment to repay PACE Note
- **Semi-annual payments**

**Customer**
Case Study *(Pending)*

PPA + Leasing for Not for Profits

**Energize NY PACE Finance will accept PPA/Lease structures**
- Eliminates Credit issues between system owner and property owner
  - *Not for profits; small and medium commercial buildings; buildings with no tax appetite*
- Up to 20 year terms
  - *Immediately profitable investment; no upfront costs*

**Energize NY Requirements:**
- Project must generate positive cash flow to the property owner
  - *(eg: electricity, roof lease payments, higher tenant bills)*
- Transferability must be built into PPA/Lease Contracts
- The Improvements remain operational and cannot be removed through the term of the financing
- The term of the financing is shorter or equal to the term of the PPA
Case Study:

Capital Structuring Innovation
Energize NY Finance leverages Federal Qualified Energy Conservation Bonds

- Westchester government allocated QECB bonding authority to Energize NY
- Affordable multifamily housing & not-for-profits
- Federally subsidized interest rates (0.9% - 3.0% as of 12/15/15)
Commercial.EnergizeNY.org
P 23
Municipal Tax Receiver
Special Tax “Charge” payments
Energize NY Finance offered to property within the Municipal boundary
Energize NY PACE Capital Flows
Capital markets
EIC Bank Trustee
Pledged Municipal Payments
Allows for lower cost of capital
$ Bond payments
$ Bond funds
$ Bond funds
Energy Improvement Corporation
Energizeny.org
Energize NY
FLOW OF MONEYS

Municipality Payments/Finance Agreement Payments

Debt Proceeds

Program Fund

Cost of Issuance Fund

Payment Fund

Pledged Payment Collection Account

Applicable Interest Account

Applicable Principal Account

Reserve Fund

Program Administration Fund

Cash Flow Stabilization Fund

Municipality Reimbursement Fund

Property Owner

Bondholders

(1) Pledged to Bondholders.
(2) 3% paid at closing.
(3) Cash flow stabilization fund transfers allowed without restriction; must exceed Cash Flow Stabilization Threshold at time of transfer to Reserve or Program Admin Fund.
(4) .65% of par amount of Series of Bonds to be deposited at closing
(5) .35% of par amount of Series of Bonds to be deposited at closing; NOT available to Bondholders.
(6) 1% surcharge on Interest Rate
(7) .35% surcharge on Interest Rate

DOE Grant funds

NYS Green Bank Letter of Credit

Property Owner
Tax Exempt PACE: Nonprofit HQ & Retail

<table>
<thead>
<tr>
<th>Sources &amp; Uses</th>
<th>Amount</th>
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<tbody>
<tr>
<td>IRB (tax-exempt)</td>
<td>$6,000,000</td>
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<tr>
<td>Taxable Mortgage</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Local Govt. Grant</td>
<td>$3,000,000</td>
</tr>
<tr>
<td>Financing Gap</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Project Cost</td>
<td>$14,000,000</td>
</tr>
</tbody>
</table>

$2.9 M savings above code over 20 years qualifies the property for $2 M+ in PACE

<table>
<thead>
<tr>
<th>PACE Financing</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax-Exempt PACE</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>Taxable PACE</td>
<td>$500,000</td>
</tr>
<tr>
<td>Total PACE</td>
<td>$2,000,000</td>
</tr>
</tbody>
</table>

- No first-cost barrier allows energy upgrade
- HVAC, LED Envelope, Restaurant Equipt.
- Bond counsel approved tax-exempt use of PACE
- PACE Provides $2M of Equity into $14M rehab
- Tax-exempt / taxable PACE split mirrors IRB
CivicPACE: Empowering Public Benefits

- PACE is a Public Benefit codified under statute
- Designed to improve sustainability of building stock
- Benefits should flow to all members of community
- Civic organizations are the fabric of communities
- CivicPACE realizes the promise of PACE
Thank you!

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