We’ll be starting in just a few minutes….

Tell us…please send your response to the webinar organizers via the question box:

What topics are you interested in for future webinars?
Made to Fit
How Paid-From-Savings Projects Can Work for Small Organizations, Too

February 7, 2016
3:00-4:00 PM ET
Both small and large organizations encounter technical and financing barriers to installing energy and water saving improvements in their multifamily properties.

There are several ways to address some of these impediments.

This webinar provides information on when and how owners may use a pay from savings model.
## Today’s Presenters

<table>
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<tr>
<th>Name</th>
<th>Organization</th>
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<tr>
<td>Toni Gallo</td>
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<td>Jeff Greenberger</td>
<td>Affordable Communities Energy (ACE)</td>
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<td>Richard Santangelo</td>
<td>Apollo Engineering Solutions</td>
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Webinar Logistics

- All participants will be muted during presentation
- Question and Answer period during the last 20 minutes of the webinar
- Questions may be submitted throughout the webinar by typing them in the Chat box
- Session will be archived and posted to the web
Today’s Topics

- Objective of webinar
- Definitions
- Benefits
- Challenges
- Solutions
- Process
- Q&A
Today’s Objective

To describe how both small and large organizations can overcome the technical and financing barriers to installing energy and water saving improvements using a pay from savings approach.
Definitions

- **ECMs**: “Energy conservation measures,” may also include water conservation measures and renewable energy systems

- **Public Housing**: Government-administered (HUD), federal aid to 3,300 housing agencies for eligible low-income families, the elderly, and persons with disabilities

- **Affordable Housing**: Partially government-subsidized housing affordable by individuals whose income is below the median household income (tax credits, below-market loans, direct rental subsidies)

- **Pay from savings (PFS)**: Using energy and water savings to repay the cost of installing ECMs
Why Bother? The Benefits of PFS Projects

- New/repaired energy & water systems = reduced O&M Costs
- Lower utility costs = higher operating income
  - Freeing scarce funds for other needs
  - Higher Asset Value
- Improved resident health and comfort
- Reduced greenhouse effect
- Jobs for the local economy
- U.S. energy independence
Key Challenges: Affordable Housing

- **Resources:** “Our staff doesn’t even have time to think about it.”

- **Expertise:** “We don’t know what to change or how to assess the risks.”

- **Capital:** “We don’t have a way to pay for these improvements.”
  - We don’t have extra money lying around
  - Our institutional balance sheet has to be used for affordable housing
  - No new liens, our multiple layers of capital don’t want to be disturbed
  - We don’t have enough confidence in the returns to borrow money
Key Challenges: Public Housing

- **Resources**: “Process is too complicated; 12-18 months installation; RAD option”
- **Expertise**: “Energy not core mission; lack of experience; where do I begin?”
- **Capital**: “PHAs risk averse; closed community of lenders; guaranteed savings

  - What collateral is available to secure the loan?
  - What impact will proration of funding have on debt service?
  - What is the impact to debt service if the PHA transitions to RAD?
  - Where is the guarantee in savings if my project is self-managed versus an ESCo-managed project?”
PFS Solutions: Affordable Housing

- **Lease Agreements**
  - Equivalent of financing
  - Limited to certain measures (large equipment, renewables, etc.)
  - On balance sheet as capital lease

- **Energy Services Agreements (ESA) and Power Purchase Agreements (PPA)**
  - Equivalent of financing
  - Not generally limited in what improvements are covered
  - On balance sheet as capital lease (probably)
  - Length of agreements vary (10 to 25 years)

- **“Low-hanging Fruit” Approach**
  - Just do what can be paid for through grants, incentives, rebates, etc.
PFS Solutions: Public Housing

- Lease purchase agreements or long-term debt by third-party institutions
  - HUD incentives
  - Established and well capitalized market for EPCs
- Capital Fund or Capital Fund financing (limited incentives)
- Off balance sheet financing
- Power Purchase Agreements (PPA)
- Tax credit financing
- Grants (state, etc.); utility rebates
What Do We Need to Consider?

What Do We Need to Know?
- Recent utility consumption
- Condition of systems; recent replacements or repairs
  - Resident comfort, health and safety
  - Evidence of need for repairs or replacement, inefficient operations
- Where in the redevelopment cycle; disposition plans (AH)
- Stakeholders

What Are Our Goals/Limitations?
- Short-term vs. greater total benefits
- Ability to self-fund, some or all of the costs
- Risk tolerance
- Value to our institution of environmental goals
You’ve Gotten to “Yes,” What Now?

Affordable Housing

You Approve the Transaction

Who are the other stakeholders

Do you HAVE to ask for their approval (or beg forgiveness)

What are their concerns/ how can you address them

Draft Request for Approval

Public Housing

PHA/Board Approves; PHA Develops RFP to Secure ESCo

 HUD approves Contract Provisions in RFP

ESCO Conducts IGEA; prepares EPC project for HUD submission

Financing Secured

HUD approves project; issues NTP

Potential for utility savings identified

Fair and open competition

Energy and water conservation measures

Financing approved

Savings pays project costs

Board approves ED decision to initiate a project

Compliance to HUD procurement regulations

Renewables

Resiliency

Healthy Homes

Security interests resolved

Security interests approved

Lenders

Tax credit or other investors/partners

HUD or other governmental parties

Tax issues

Book Issues (capital lease)

Security interests

Cash flow

“Rules”

Allow for PLENTY of time for them to respond
You Have Approval; What Happens Now?

Affordable and Public Housing

1. Sign Agreement
2. Award and Implement Construction/Installation
3. Commission the Work
4. Operate and Maintain
5. Payment

What happens at the end of the term?
Thank You

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Additional Resources
Resources

- NAHRO Journal of Housing and Community Development, March/April 2016, *The Intersection of EPC and RAD: A Roadmap for PHAs*
  - Article addresses the decision-making process for a PHA considering the transition to HUD’s Rental Assistance Demonstration Program.

- NAHRO Journal of Housing and Community Development, May/June 2014, *Fuel Cell Technology Applications in PHAs*
  - Article addresses the potential cost benefits and resiliency aspects of considering fuel cell technology in public housing authorities.

- [HUD’s Energy Performance Contracting, on HUD.gov](https://www.hud.gov)
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