Going Deep and Going Broad: The Next Generation of Multifamily Energy Programs

Jon Braman (Bright Power), Matt Brown (NYSERDA), Samantha Pearce (New York State Homes and Community Renewal), Molly Simpson (Fannie Mae), Darien Crimmin (WinnCompanies)

Curated by Geoff Gunn (Arup)
Who we are

Panelists:

• **Molly Simpson**, Program Manager, Multifamily Green Financing Business, Fannie Mae
• **Samantha Pearce**, Vice President of Sustainability, Office of Housing Preservation, NYS Homes and Community Renewal
• **Darien Crimmin**, Vice President of Energy and Sustainability. WinnDevelopment

Moderator

• Jon Braman (moderator) EVP Strategic Initiatives, Bright Power
Why Deep? Why Broad?

MA Decarbonization Roadmap (Dec 2020) aims to “ensure Massachusetts reduces greenhouse gas emissions by at least 85% by 2050 and achieves net-zero emissions.”

• “just under three million housing units will need... heating system retrofit
• “Ideally, almost every building would also get some degree of envelope improvement, with at least two-thirds receiving deep energy efficiency improvements.”

How many existing MF properties need to be decarbonized to hit these goals?
Format

• Panelist intro presentations
• Moderated discussion on 5 themes
  • Going deep
  • Going broad
  • Impact transparency
  • Financing strategies
  • Interplay with BPS policies
• Wrap up

*1-2 audience questions per topic
We hope you will learn:

• Technical and incentive strategies for achieving deep energy savings/electrification/decarbonization.

• Program design strategies for delivering retrofits broadly, to over 1000 properties per year.

• Best practices for ensuring results through transparent measurement and verification.

• Strategies for leveraging capital sources to finance multifamily energy efficiency and decarbonization.

• Ideas for how energy programs can work in tandem with ambitious Building Performance Standard policies from cities or states.
Challenge to panelists

Share what you’ve seen that works, and be honest about roadblocks that remain.

What strategies already used in your current programs or experience could be part of how we achieve full MF building sector decarbonization in the next 30 years?

“Confront the brutal facts but never lose faith.”
Fannie Mae Green Financing has grown to a total of more than $100 billion in Green MBS Issuance

Fannie Mae Green Financing Volumes

<table>
<thead>
<tr>
<th>Year</th>
<th>MBS Issuance</th>
<th>Loans</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>$55.7M</td>
<td>4</td>
</tr>
<tr>
<td>2013</td>
<td>$58.2M</td>
<td>4</td>
</tr>
<tr>
<td>2014</td>
<td>$20.4M</td>
<td>3</td>
</tr>
<tr>
<td>2015</td>
<td>$247.9M*</td>
<td>7</td>
</tr>
<tr>
<td>2016</td>
<td>$3.6B</td>
<td>111</td>
</tr>
<tr>
<td>2017</td>
<td>$27.8B</td>
<td>1,173</td>
</tr>
<tr>
<td>2018</td>
<td>$20.2B</td>
<td>1,130</td>
</tr>
<tr>
<td>2019</td>
<td>$22.8B</td>
<td>1,020</td>
</tr>
<tr>
<td>2020</td>
<td>$13.0B</td>
<td>500</td>
</tr>
<tr>
<td>2021</td>
<td>$13.5B</td>
<td>527</td>
</tr>
</tbody>
</table>

*Includes one cash loan

Source: Fannie Mae
Increasing worldwide focus on climate continues to spur investor interest in Green bonds. As a result, the green financing industry is rapidly changing.
Approaches to Net Zero

Regulatory Approaches
- Natural Gas Bans (ex: Berkeley, CA; proposed in CA, WA, MA)
- Performance-Based Targets (ex: DC, NYC, Boston)
- Building Codes (ex: Seattle, Boston, DC)

Market Based Approaches
- Green Mortgage Financing
- Green Building Certifications
Two Paths to Green Financing

**Already Green?**
**Green Building Certification**

**Benefits:**
Preferential Green Pricing

**To Qualify:**
Property has one of the recognized Green Building Certifications in place by Rate Lock

**Making Some Improvements?**
**Green Rewards**

**Benefits:**
- Preferential Green Pricing
- Free Energy and Water Audit
- Increased Loan Proceeds

**To Qualify:**
Choose to implement Green improvements projected to reduce at least 30% combined energy and water, of which a minimum of 15% must be attributable to savings in energy consumption

**Execution**
Green Mortgage Backed Security
**Efforts Towards Zero**

Green Building Certification *Towards Zero* Group

- **Towards Zero**
  - Small volume, big impact

  - **Group 1**
  - **Group 2**
  - **Group 3**

**Green Rewards**

- **Existing Buildings**
- **Incremental Efficiency Improvements**

**Renewable Energy Generation**

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Pax Futura, designed by NK Architects, combined highly efficient construction and deep energy efficiency features. The property received PHIUS + certification from Phius (Passive House Institute U.S.). This made it eligible for preferential Green Building Certification pricing under Fannie Mae’s Towards Zero certification group, resulting in a lower all-in interest rate for the life of the loan.

This property’s resource conservation, solar thermal hot water system, and durable construction is a great example of how a Towards Zero green building certification can provide benefits to both borrower and tenants.
Going Deep and Going Broad:
The Next Generation of Multifamily Energy Programs
New York's Nation-Leading Climate Targets

- 85% Reduction in GHG Emissions by 2050
- 100% Zero-emission Electricity by 2040
- 70% Renewable Energy by 2030
- 9,000 MW of Offshore Wind by 2035
- 3,000 MW of Energy Storage by 2030
- 6,000 MW of Solar by 2025
- 22 Million Tons of Carbon Reduction through Energy Efficiency and Electrification

For more information visit:

https://Climate.NY.Gov
New York State by the Numbers

In January 2022, Governor Hochul announced a '2 Million Climate Friendly Home' goal by 2030, as a pathway to help the states building sector reach the 40% Carbon reduction target.

*Draft2020 results in line with DEC CLCPA accounting including upstream emission factors, 20-year GWP, and estimates from NY PATHWAYS*
HCR and NYS Energy Research & Development Agency have partnered on a pilot initiative designed to create all-electric and electric ready, or Climate Friendly affordable housing units. The **Clean Energy Initiative** will allow more New York families to benefit from healthy, clean energy homes, while providing housing developers with streamlined access to technical assistance and affordable housing finance opportunities.

<table>
<thead>
<tr>
<th>Phase</th>
<th>Phase 1A ($7.5M)</th>
<th>Phase 1B ($25M)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hard Cost funding</strong></td>
<td>$10,000/unit to offset the incremental capital costs of pursuing the scope of work</td>
<td>Up to $22,500/unit - EB</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Up to $10,000/unit - NC</td>
</tr>
<tr>
<td><strong>Soft cost funding</strong></td>
<td>$2,500/unit to fund integrated design</td>
<td>Up to $2,500/unit not to exceed $150,000/project</td>
</tr>
<tr>
<td><strong>Eligible Projects</strong></td>
<td>New Construction &amp; Adaptive Reuse under 200 units</td>
<td>New Construction, Adaptive Reuse and Existing Buildings, under 250 units</td>
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