NYSERDA Multifamily program updates – NESEA pre-conference webinar

September 28, 2023
Agenda

> **Introductions**
  - Will Xia, NYSERDA
  - Ben Milbank, Ecosystem
  - Ion Simonides, BrightPower

> **About NYSERDA**

> **New and notable about our programs**

> **Case studies from our partners**
  - Ben – Low Carbon Pathways
  - Ion – Flex Tech Multifamily
About NYSERDA

Our Vision
New York is a global climate leader building a healthier future with thriving communities; homes and business powered by clean energy; and economic opportunities accessible to all New Yorkers.

Our Mission
Advance clean energy innovation and investments to combat climate change, improving the health, resiliency, and prosperity of New Yorkers and delivering benefits equitably to all.

Our Promise
NYSERDA provides resources, expertise, and objective information so New Yorkers can make confident, informed energy decisions.
## New and notable about our programs

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INTRODUCING THE COMMUNITY DECARBONIZATION FUND (“CDF”)

CDF will provide $250MM in concessionary capital to community lenders experienced in funding clean energy projects and improvements that benefit underserved communities.

- The CDF will seek to fund a diverse and representative group of CDFIs and specialty lenders to support energy finance programs with emphasis on building electrification and affordable housing.

- CDF Applicants with emerging clean energy finance programs will be encouraged to apply, particularly those serving persistent poverty areas, communities of color, and other traditionally marginalized communities.

- The CDF is designed to be additive and complementary with existing lending programs serving disadvantaged community markets or those we know will be launched.

**EXAMPLES OF ELIGIBLE TECHNOLOGIES**

- Building electrification and supporting measures, examples including but not limited to:
  - Heating and Cooling Load Reduction
  - Weatherization
  - Windows
  - Heat recovery ventilation
  - Clean Heating Technologies
    - Air Source Heat Pumps
    - Water Source Heat Pumps
    - Ground Source Heat Pumps
    - District thermal interconnection
  - Electric Vehicle Infrastructure (including charging stations)
  - Thermal and Electric Energy Storage
  - Rooftop Solar when combined with one or more of the above listed Eligible Technologies

**INDICATIVE TERMS**

- **Amount:** Minimum of $2M and up to $25M per lender
- **Availability Period:** 24 months from closing date
- **Term:** 12 years after the closing date
- **Interest Rate:** 1.50% per annum fixed interest rate
NYSERDA recently launched a program offering (PON 5456) to support DOE LPO’s 1703 loan guarantee with an innovation waiver if NYSERDA (or other State Energy Financing Institutions SEFI) are in the capital stack.

Support firms applying to the LPO 1703 Program for the innovation waiver and secure an LPO loan guarantee or direct funding capital facility.

This gives firms the ability to source the cheapest cost of capital for decarbonization impact.

This initial program is for $20mm and are looking for proposals from firms actively pursuing an LPO 1703 support approach.

NYSERDA will host a webinar about this solicitation on October 10, 2023, at 10:00 a.m. EST. Interested parties can register here. This webinar will be recorded and posted on the NYSERDA website.
NYCHA Tech Challenge: 120V Induction Stove

Plug-in-ready Induction Range

Manufacturer RFP to Launch October 2023

Min. P.O. of 10,000 units for product that enables cost-effective electrification

NYSERDA funds technical spec development and pilot

PRODUCT:
> Plugs into standard, 120V/20amp outlet
> Easily installed by building staff
> No electrical upgrades + avoid gas line repairs = $$Millions in savings
> Equal or better cooking experience
> No resident disruption + Indoor air quality benefits + new cookware

Enabling Product for Decarbonization

Clean Heat for All
2021 - ongoing

120V Induction Stove
Empire Building Challenge (Cohort 3: MF only)

**GOALS**

- Accelerate *investment* in decarbonization.
- Enable *replication and scale* across New York’s existing large commercial and multifamily building stock.
- Drive *innovation* and market *demand*.

**FUNDING**

- **Up to 100K** for Technical Assistance to develop a decarbonization roadmap and project concepts.
- If selected, partners will compete for *up to 3M* in project funding.

**Resources**

- **GUIDE: Planning for Resource Efficient Decarbonization**
- **Building Decarbonization Insights**
- **Strategic Decarbonization Assessment**

**Eligibility**

- Multifamily only
- 50 units minimum
- No height requirement.
- Heat and DHW systems must be fueled by gas or oil.
- Apply as a team (Building Owner + Solution Provider)
- Solicitation documents

Applications due Nov. 16, 2023 by 3pm.
NYSERDA Pilot Projects (PON 4614)

**Community Heat Pump Systems Pilot Program launched in Q1 2021**

- > 54 project sites awarded through Round 9 (some contracts still pending)
  - 48 Category A: Feasibility (3 contracts pending)
  - 11 Category B: Design (5 contracts pending)
  - 5 Category C: Construction (3 contracts pending)

> Category D projects
  - Market opportunities study
  - Municipal charrettes
  - “Project Champions” guidebook
  - Outreach to LMI housing
  - Aquifer Thermal Energy Storage (ATES) study

Sites cover >2,200 buildings, ~100M SF conditioned space

50% upstate, 50% downstate

>40% located in a Disadvantaged Community

~33% of conditioned space is multi-family in NYC
Questions?

Please email MultifamilyInfo@nyserda.ny.gov for additional questions or reach out to:

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Thank you!
International Tailoring Company Building
Case Study

Sep 28 2023
• Integrated engineering & construction company specializing in turnkey decarbonization and energy efficiency projects exclusively in existing buildings.

• Developing and building multiple NYC decarbonization projects using incentive programs from NYSERDA and NYS Utilities.

• Committed to delivering the results our clients seek through contractual guarantees.
International Tailoring Company Building

156,000 sqft, 180-unit residential building in Manhattan

- Mechanical equipment close to end of life
- Operationally complex system
- Comfort complaints due to switchover system
- Large LL97 fines
• Existing System

- Individual apartment-based fan coils units
- Two-pipe hydronic system
- Gas-fired absorption chiller/boiler combo units
• Hybrid Electrification

• Maximize GHG reduction while engineering around existing building constraints
• Hybrid Electrification System
International Tailoring Company Building

Outcomes

- Significant improved resident comfort
- On track for 57% reduction in energy usage
- Cooling system electrified while reducing total kWhs
- 80%+ reduction in on-site GHG emissions
- LL97 compliance to 2050
- Incentives enabled positive 20-year Life Cycle Cost
International Tailoring Company Building

**Lessons Learned**

- Value of proactive planning
- Focus on outcomes – a LL97 project can achieve much more than just carbon reductions
- Construction phasing can be the most challenging part of a project
- Compounded value in whole system decarbonization + energy efficiency
- Evaluating beyond just simple paybacks
THANK YOU!

Ben Milbank
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FlexTech/Low Carbon Capital Planning Case Study

Bright Power

September 28, 2023
Bright Power at a Glance

- Energy Engineers focused on reducing energy & water consumption and improving resident comfort for multifamily owners & operators
- Founded in 2004 in New York City
- Employs 100+ employees
- Experience
  - Benchmarking proprietary database includes 100,000+ buildings, 15,000+ properties
  - Performed 2,400+ energy audits
  - Completed 600+ energy efficiency retrofits
Example Project - Phase 1: FlexTech Audit

- Co-op, Landmark building in the Bronx built in the 1960s with 20 stories and 450 units
- FlexTech ASHRAE Level 2 energy audit delivered in early 2022 with the 50% cost-share from NYSERDA
  - Audit met the compliance requirements of NYC Local Law 87
  - Local Law 97 fines avoided for 2024-2029, but significant in the 2030 compliance period
- Co-op Board wanted to further explore the various electrification options outlined in the audit
Example Project - Phase 2: LCCP Electrification Study

- Completed the 1st draft of the study in May 2023
- Project received critical 75% cost-share from NYSERDA for the study
- In-depth investigation of the space heating & cooling and domestic hot water electrification options
  - Full electrification vs. Hybrid electrification scenarios
- Hybrid scenario gets the building into LL97 compliance until 2034
- Facing challenges with planned heat pump placement on garage roof
Contact Us

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