Welcome

NY Residential Market Advisory Group

October 11, 2023

Crowne Plaza / Desmond Hotel in Albany, NY



Today's Agenda

```
10:00 – 10:15 Group Introductions and Opening Remarks
10:30 – 11:00 NYS Residential Climate Goals and Overview of Existing Programs
11:00 – 11:45 Inflation Reduction Act's Home Energy Rebate Programs
11:45 - 12:00 Breakout Session Description and Discussion
12:00 – 1:00 Lunch & Networking
1:05 - 2:05 Breakout Session 1
2:15 – 3:15 Breakout Session 2
             Breakout Session Overviews and Closing Remarks
3:15 – 4:00
```

Opening Remarks

Introductions

NYSERDA: Courtney Moriarta, Director, Single Family Residential

Laura Geel, Assistant Director, Single Family Residential

Loic Chappoz, Senior Advisor, Multifamily Residential

Kearns & West: Trevor Reddick, Director

Adam Saslow, Vice President

Miquela Craytor, Vice President

Residential Market Advisory Group (RMAG) Overview

A forum for the residential market that advances collaboration among stakeholders and enables the market to provide input to the New York State Energy Research and Development Authority. The RMAG addresses topics related to residential energy efficiency and clean energy markets activities for existing homes.

Mission: to bring together residential market actors to envision the next generation of residential clean energy solutions and to facilitate deployment of strategies that stimulate market growth, deliver customer value, and enable achievement of New York State's energy policy goals.

Residential Market Advisory Group Objectives

- Maintain market awareness of public policies driving investments in energy efficiency and clean energy in the residential market.
- Share information on current and planned activities to enable coordination and avoid unproductive duplication of efforts in advancing progress towards policy and industry objectives.
- Discuss opportunities and challenges associated with wide-scale deployment of energy efficiency and clean energy services for the residential sector and seek solutions to overcome market barriers.
- Help guide the direction of the market's existing and future clean energy solutions.
- Make connections and develop collaborations among participants and partners to meet mutual objectives.
- Develop and coordinate shared messaging and outreach strategies where appropriate.

2023 Residential Market Advisory Group Priorities

- 1. Improving market awareness and urgency for energy efficiency and residential clean energy
- 2. Improving the customer experience with Air Source Heat Pumps
- Ensuring meaningful stakeholder engagement opportunities and clear communications about the Inflation Reduction Act for NYS residents and contractors

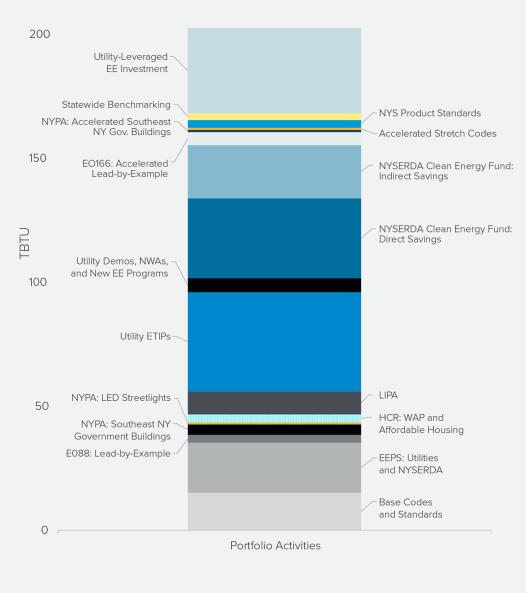
Meeting Ground Rules

- Honor the agenda.
- Participants should be willing to interact openly, honestly, and respectfully with all other members.
- This meeting will proceed under Chatham House Rules, meaning that
 participants are asked to operate under a veil of anonymity, where all
 comments made during this meeting are mutually agreed to be unattributed to
 participants.
- Notes are being taken, and a meeting summary, sans any attribution of comments made, will be posted on NYSERDA's website.

Icebreaker: Raise your hand if...

NYS Residential Climate Goals

EE Activities Total Site Tbtu Savings By 2025 (Cumulative Annual, 2020-2025



Energy Efficiency and Building Decarbonization

2025 target:

185 TBtu

of onsite energy savings*

ENERGY EFFICIENCY ACTIVITIES TOTAL SITE TBTU SAVINGS BY 2025 (CUMULATIVE ANNUAL, 2015–2025)

NYSERDA's Role

- > Develop policy and strategic leadership
- > Advance codes and standards
- > Eliminate barriers
- > Provide financing
- > Support market and technology innovation

NYSERDA Strategic Focus Areas



BUILDING AN INCLUSIVE CLEAN ENERGY ECONOMY



SUPPORTING CLEAN ENERGY JOBS



ACCELERATING THE TRANSITION FROM FOSSIL NATURAL GAS TO A LOW-CARBON FUTURE



FOSTERING HEALTHY
AND RESILIENT
COMMUNITIES

Existing Programs in NYS: 1-4 Family Homes

Low to Moderate Income (<80% AMI)

- EmPower+ (NYSERDA)
- Green Jobs Green NY Loan Fund (NYSERDA)
- Weatherization Assistance Program (HCR)
- Emergency Heating Replacement (OTDA)
- NYS Clean Heat (Utilities)
- Other Utility EE Programs

Non-LMI

- Residential Energy Assessments (NYSERDA)
- Comfort Home (NYSERDA)
- Green Jobs Green NY Loan Fund (NYSERDA)
- NYS Clean Heat (Utilities)
- Other Utility EE Programs

Existing Programs in NYS: Multifamily

Technical Assistance and Planning

- FlexTech (NYSERDA)
- Low Carbon Pathways (NYSERDA)

Implementation

- Low Carbon Pathways (NYSERDA)
- Affordable Multifamily Efficiency Program (AMEEP, Utilities)
- New York State Clean Heat (Utilities)

Vision for Residential Market Engagement

Create a pathway for residents that is easy to understand, simple to participate, and provides clear, direct guidance and connections that allows building owners and renters to improve the energy efficiency of their homes and move towards electrification.

Multiple offers are expected to continue, and the pathway for contractors and their customers should be smooth. The intricacies of funding braiding, data sharing between entities, and workflow management should be seamless for the participant.

Overview of DOE's Guidelines

Inflation Reduction Act's Home Energy Rebate Programs

Home Energy Rebates Program

The Inflation Reduction Act of 2022 includes **two provisions rebates** for home energy efficiency and electrification projects. These two provisions are:



Section 50121: Home Energy Performance-Based, Whole House Rebates (Referred to as Home Efficiency Rebates, or HER).



Section 50122: High-Efficiency Electric Home Rebate Program (Referred to as Home Electrification and Appliance Rebates, or **HEAR**).

Together, these provisions are referred to as the Home Energy Rebates.

New York State will receive a total of \$317.7M for the Home Energy Rebates, for a budget period no later than September 30, 2031.

Key Program Application Requirements & Considerations

- Budget Allocations
- Community Benefits Plans*
- Consumer Education and Outreach*
- Consumer Protections through Quality Assurance
- Customer Application Process
- Data Collection and Evaluation
- Data Protection and Data Standards
- Delivering Rebates to Consumers*
- Energy Savings Calculations

- Home Energy Assessments*
- Integrating with Other Programs
- Market Transformation Plans*
- Maximize Rebate Impact*
- Multifamily Considerations*
- Post Installation Certificate
- Qualified Measures
- Quick Start Program
- Utility Data Access Plan

^{*}Topics to be explored during today's Breakout Sessions

Home Efficiency Rebates Eligibility

- Rebates are available to households of any income.
- Rebates are available to individuals and aggregators carrying out energy efficiency upgrades of single-family homes and multifamily buildings.
- New construction is not eligible.
- States may choose to restrict program eligibility to a narrower set of households, existing conditions, and/or technologies than is allowable under the law.

HER Low-Income Eligibility Considerations

At a minimum, each State must:

- Allocate a percentage of its rebate funding for each of the rebate programs in line with its percentage of low-income households.
 - In New York State, approximately 41% of households are eligible for rebates as low-income households (defined as <80% AMI).
 - In New York, minimum allocation to low-income households is \$39M
- Allocate at least 10% additionally of its rebate funding to serve low-income multifamily buildings.
 - In New York, minimum allocation to low-income multifamily buildings is \$9.5M

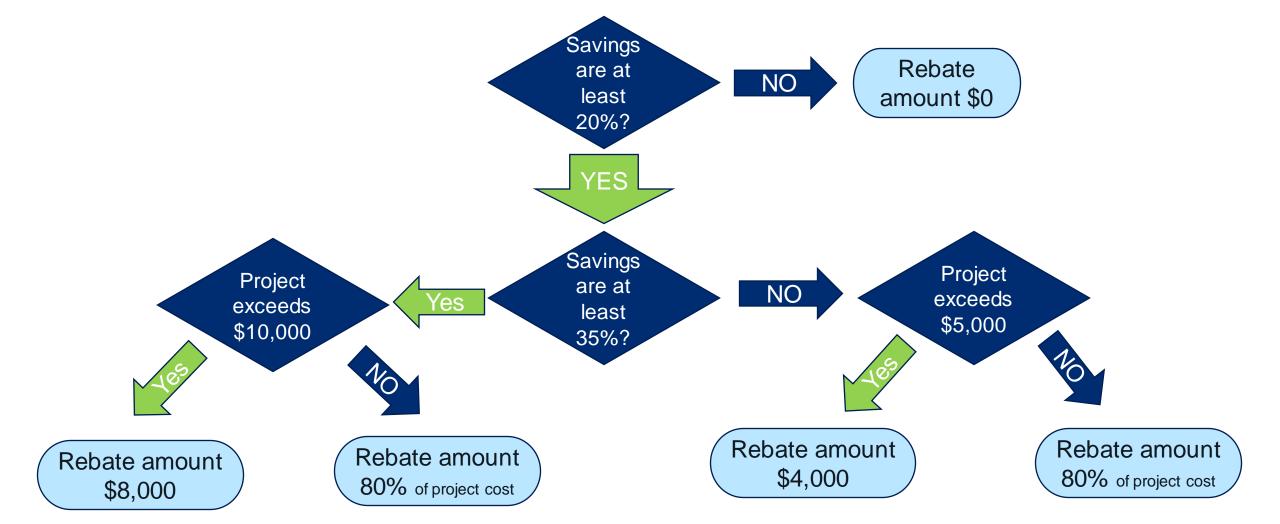


HER INCENTIVE AMOUNTS

Energy Savings (whole house)	Income >80% AMI		Income <80% AMI		
20-34% Modeled	\$2,000/home (max \$200,000 for MF)	Up to 50% of total project cost	\$4,000/home	Up to 80% of total project cost	
35%+ Modeled	\$4,000/home (max \$400,000 for MF)		\$8,000/home		
OR					
15%+ Measured	Per kWh rate equivalent to \$2,000 for a 20% reduction of energy use for average home in the state	Up to 50% of total project cost	Per kWh rate equivalent to \$4,000 for a 20% reduction of energy use for average home in the state	Up to 80% of total project cost	
MF buildings require "not less than 50%" of occupants to meet the eligible income level to qualify					

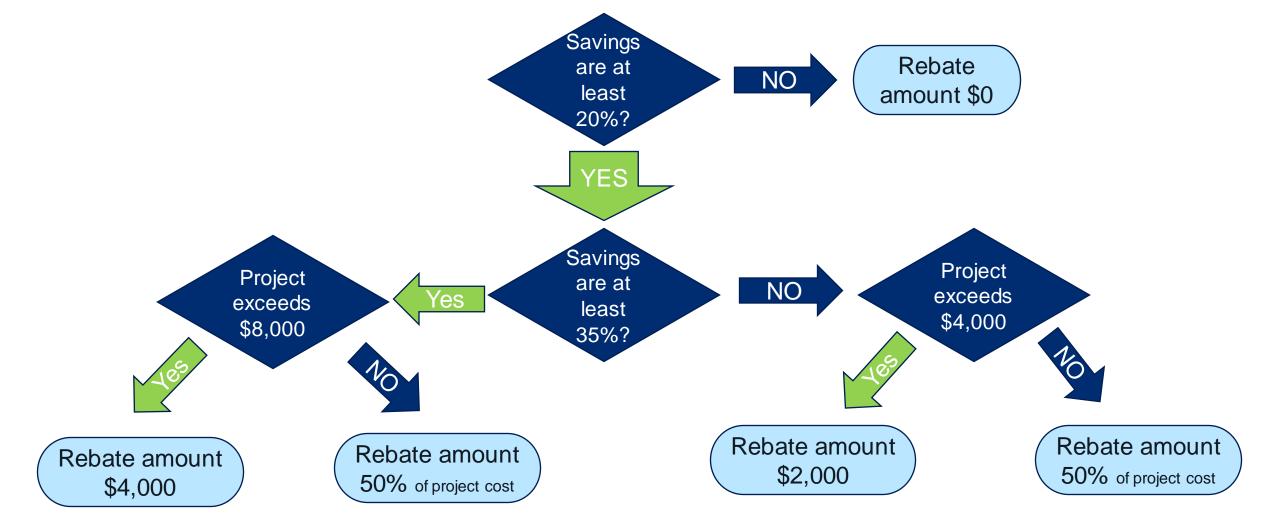
HER "low-to-moderate income" (<80% AMI) Flow Chart





HER "market rate" income (>80% AMI) Flow Chart





Home Electrification and Appliance Rebates Eligibility



- The law specifies that HEAR is available to:
 - 1. low- or moderate-income households, defined as <150% AMI
 - 2. individuals or entities that own a multifamily building with low- or moderate-income households comprising at least 50% of the residents, and
 - 3. governmental, commercial, or nonprofit entities that are carrying out projects for low- or moderate-income households or multifamily building owners.
- HEAR may cover up to 100% of a total qualified electrification project's cost for households with a total annual income less than 80% AMI.
- States may decide if new construction projects are eligible.
- States may choose to restrict program eligibility to a narrower set of households, existing conditions, and/or technologies than is allowable under the law.

HEAR ELIGIBLE MEASURES AND REBATE AMOUNTS



Measure Type	Rebate Amount	80-150% AMI	<80% AMI
Heat Pump Water Heater	\$1,750	Up to 50% of total project cost	Up to 100% of total project cost
Heat Pump	\$8,000		
Electric Cooking Appliance	\$840		
Heat Pump Clothes Dryer	\$840		
Electrical Service Upgrade	\$4,000		
Electrical Wiring Upgrade	\$2,500		
Insulation, Air Sealing, Ventilation	\$1,600		
Maximum per home	\$14,000		

MF buildings require "not less than 50%" of occupants to meet the eligible income level to qualify
Additional installer incentive up to \$500 "commensurate with the scale of the upgrades installed"

Appliances, systems, equipment, infrastructure, and components must be ENERGY STAR certified if applicable

Maximizing Rebate Impact: Braiding Funding

Stacking Home Energy Rebates with non-federal funds (like NYSERDA's programs) is generally allowable and encouraged only if the total rebated value does not exceed the total cost of the project.

NYSERDA has multiple funding sources, especially for EmPower+, and funding braiding must be designed in a way to honor each source's priorities, regulations, and budget cycles.

DOE is working to develop guidance materials for funding braiding and more information will be available at a later date.

Key Implementation Considerations

- Leverage existing NYSERDA programs to the extent possible to maximize funds available for rebates
- Create a seamless experience for customers and contractors
- Provide clear, concise information on all available offers
- Offer customized recommendations to customers to maximize impact

Community Benefits Plan Requirements



Support Meaningful Community and Labor Engagement



Engage and Support a Skilled and Qualified Workforce



Incorporate Diversity, Equity, Inclusion and Accessibility (DEIA)



Address Justice40 Initiative

Market Transformation Plans

Each State must submit a Market Transformation Plan that:

- Describes how the State program will enable the market to recognize the value of homes that have been upgraded through the Home Energy Rebates, including at time of sale/rental.
- Describes elements of the program design and/or activities the State program will undertake to support the following goals throughout the program as well as after depletion of the Home Electrification and Appliance Rebates funds:
 - Cost sharing, braiding, and/or coordinated financing with potential funders and financiers of home energy upgrades.
 - Utilize rebate programs to enable new business models in partnership with private capital to monetize grid benefits; and
 - Sustainable business models of home energy contractors.

IRA Home Energy Rebate Program Timeline

Summer/Fall 2023 Spring 2023 **Early 2024*** Q3 2024* DOE approves Systems Planning Preliminary planning/ NYSERDA makes plan NYSERDA plan and admin funding from and submits to DOE releases funds RFI answers to DOF DOE System modifications Begin deploying Rules from DOE planning rebates to consumers Stakeholder Contractor training Engagement

Outreach

Additional Opportunities through the Inflation Reduction Act

Tax Credits

Over the next decade, the IRA will offer rebates, tax credits, and low-cost financing to make the switch from fossil-fueled appliances and equipment to new, clean electric models. New Yorkers can often combine these IRA benefits with State incentives and programs to maximize savings on electric vehicles, solar panels, energy efficiency upgrades, heat pumps, and more.

Full details at: https://www.nyserda.ny.gov/All-Programs/Inflation-Reduction-Act

Training for Residential Energy Contractors (TREC)

The TREC program will provide States the ability to develop and implement a state workforce energy program that prepares workers to deliver energy efficiency, electrification, and clean energy improvements, including those covered under the Home Energy Rebate Programs. New York State is expected to receive \$6.3M.

The goals of the TREC program are to:

- Reduce the cost of training contractor employees by providing workforce development tools for contractors, their employees, and individuals.
- Provide testing and certifications of contractors trained and educated to install home energy
 efficiency and electrification technologies and deliver residential energy efficiency and
 electrification improvements.
- Partner with nonprofit organizations to develop and implement a State sponsored workforce program that attracts and trains a diverse set of local workers to deliver the influx of new federally-funded energy efficiency and electrification programs.

Icebreaker 2: Temperature Check

Breakout Sessions

How it will work

Breakout Session 1 1:05 - 2:05

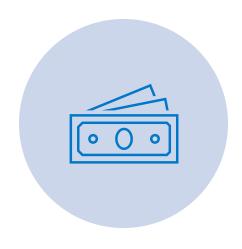
Breakout Session 2 2:15 - 3:15

There are 3 session topics. Each will be repeated during the 2 breakout sessions, so you can choose 2 out of 3 to participate.

Breakout Session Topics







1. THE CUSTOMER'S JOURNEY TOWARD EFFICIENCY AND ELECTRIFICATION

2. DEVELOPING CLEAR AND CONCISE MESSAGING

3. ECONOMIC BENEFITS OF IRA'S HOME ENERGY REBATES

1. The Customer's Journey Toward Efficiency and Electrification

This breakout session will focus on ways the industry can help customers through the decision-making process towards full building electrification.

Topics for discussion will include:

- Customer's awareness and education needs;
- Energy audits geared to electrification; and
- Tactics to encourage customers to go deeper with their energy efficiency and clean energy options

Room Location: 2,4 King Street

2. Developing Clear and Concise Messaging

This breakout session will be a forum to gather feedback to inform NYSERDA's planning process for market engagement activities, marketing plans, and community-benefit planning.

Discussion topics include:

- Best practices for communicating by audience type
- Identifying preferred terminology to communicate IRA HER in simple terms
- Ways to create a sense of importance and urgency around home improvements and available financial offers
- Identifying novel ways to connect with customers.

Room Location: 6 King Street

3. Economic Benefits of IRA's Home Energy Rebates

This breakout session will focus on key components of a **Community Benefits Plan using IRA** funds.

Discussion topics will include:

- Prioritizing economic benefits that can be realized from IRA funds
- Identifying ways to design, implement, and measure economic benefits to disadvantaged communities.
- Identifying opportunities to create high-quality jobs for members of disadvantaged communities.

Room Location: 8 King Street

The Customer's Journey Toward Efficiency and Electrification

1. The Customer's Journey Toward Efficiency and Electrification

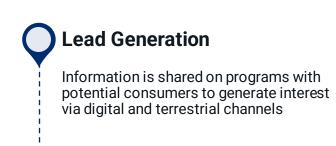
This breakout session will focus on ways the industry can help customers through the decision-making process towards electrification.

Topics for discussion will include:

- Customer's awareness and education needs;
- Energy audits geared to electrification; and
- Tactics to encourage customers to go deeper with their energy efficiency and clean energy options

Room Location: 2,4 King Street

A Typical Residential Energy Efficiency and Clean Energy Customer Journey





Contractors receive leads, complete a home energy assessment, and produce a scope of work.

Work Completes and Project Close Out

Scoped project is completed, including quality assurance check and administrative close-out for incentives.

Interested consumers submit information and are evaluated to identify what incentives they qualify for.

Information Collection for Eligibility

Customer executes an agreement, and the energy efficiency or clean energy improvement project begins.

Sale of Services and Work Starts

Continuing data collection, education, and assessing interest in new projects along the building electrification journey.

Follow-up and Follow-on

Each stop on the customer journey has been setup as a discussion station in the room. You will cycle through the full customer journey, talking with other attendees and using post-it notes to provide answers to these discussion questions.

- What does success look like at this stop on the customer journey?
- Who is doing this right? Whose work should we be aware of? Why?
- What are the greatest barriers to achieving success?
- Who should be part of solving these barriers? What can they do?
- What datapoints should be tracked to help drive results? How should they be tracked?

Closing and Next Steps



- Feedback on Your Experience: Please complete a feedback form using the QR code. Your input will help us improve on the RMAG experience and better support stakeholder efforts to engage with NYSERDA programs. We ask that you complete this form by Monday, October 16, 2023.
- Meeting Summary and Presentation: A meeting summary and presentation materials will be made available via the Residential Market Advisory Group - NYSERDA Webpage in the coming weeks.