



NYSERDA Residential Market Advisory Group (RMAG) Quarterly Meeting

Webinar: March 15, 2023

Meeting Summary

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RMAG Meeting Q1 2023

Meeting Summary

Wednesday, March 15 at 2:00pm ET

Background

On March 15, 2023, the New York State Energy Research and Development Authority (NYSERDA) hosted a virtual meeting of the Residential Market Advisory Group (RMAG).

NYSERDA Single Family Residential leadership and staff gave presentations on state and federal policy updates, and a Q&A session was held with Mark Dyen, Senior Consultant at Mark Dyen Consulting. Each session included engagement activities for participants to weigh in on priorities for NYSERDA programming and the RMAG.

In total, 65 individuals attended the meeting, including 10 NYSERDA staff.

Meeting Agenda

- *Welcome, Agenda Review, and Introductions*
- *Opening Statement*
- *Residential Market Advisory Group (RMAG) Updates*
- *NYSERDA Policy and Program Update*
- *Inflation Reduction Act*
- *Preliminary Priority Setting Session and Closeout*

Welcome, Agenda Review, and Introductions

Trevor Reddick, facilitator for the meeting from Kearns & West, opened the proceedings. He thanked attendees for their participation and briefly reviewed the meeting agenda, housekeeping items, and reviewed the different sectors of the residential clean energy market represented on the call. Trevor ended the welcome segment with an icebreaker activity via the platform PollEverywhere, asking participants to respond to the question, “Within the residential clean energy space, what is your business goal or aspiration for 2023?”

After reviewing responses, Trevor introduced Emily Dean, Director of Housing Decarbonization at NYSERDA, for opening statements.

Opening Statements

Emily thanked attendees for their participation, noting the diversity of participants across the market. Emily provided an update on recent actions in New York spearheaded by Governor Hochul to facilitate the state’s position as a climate and equity leader. In Governor Hochul’s 2023 State of the State address, she outlined an executive budget that is currently in the New York state legislature.

For new construction, the proposed budget includes zero emissions standards for the residential and commercial building sectors, and prohibitions on onsite fossil fuel combustion for smaller buildings by 2025 and for larger buildings by 2028. These proposals aim to address climate issues while also improving the health and safety of residents.

For existing buildings, proposals include the phase out of new fossil fuel space and water heating equipment by 2030 in residential and low-rise multi-family units. These requirements would also go into effect for commercial and large multi-family buildings by 2035. Emily clarified that these measures would not ban existing gas cooking equipment and that an exemption process is being explored.

Lastly, Emily noted conversations have begun on new energy efficiency program funding strategies to begin in 2026. The key question guiding that process is how to optimize the combination of NYS ratepayer and federal resources from the IRA for highest impact in the housing sector. Emily concluded by thanking participants for their insights on some of those questions during the call before introducing Laura Geel, Assistant Director of Single Family Residential at NYSERDA, to provide RMAG activity updates.

Residential Market Advisory Group (RMAG) Updates

Laura began her presentation by reviewing the RMAG's objectives. The RMAG's goals include bringing together residential market actors to discuss opportunities and challenges associated with wide-scale deployment of energy efficiency and clean energy services, sharing information, and maintaining market awareness of current public policies and activities to support scaling the residential market, and creating connections and collaborations among participants and partners to meet mutual objectives. The group's process diagram, reflecting its structure and activities, is attached here as [Appendix A](#).

On a regular basis the RMAG reflects on past priorities to ensure shared understanding of progress and alignment on interest in future activities. The RMAG's priority setting process is member-driven and the forum will shift to enable exploration of member interests. In 2021 and 2022, the group had three core priorities, (1) *Normalizing Heat Pumps*, (2) *Ramping up to Meet our Goals*, and (3) *The New Normal*. Laura reviewed those priorities and detailed their outcomes as follows.

Normalizing Heat Pumps

Laura explained that nearly all activities under the *Normalizing Heat Pumps* umbrella made significant progress. Activities under this theme include:

- **Trade Ally Network:** NYSERDA's Clean Heat Connect program created a network of 5 HVAC manufacturers and 10 distributors to create technical and educational tools or resources for use across the residential sector. Thus far Clean Heat Connect has led to 15 market interventions and the creation of over 30 unique tools, including the Heat Pump Planner, sizing and design tools, and various trainings. For more information on the Clean Heat Connect ally network, please visit <https://cleanheatconnect.ny.gov>.

- Experiential Demonstrations: NYSERDA's Experience Clean Heat program addresses the need for real-world demonstrations of heat pumps and their effectiveness. Both technicians and customers can experience heat pumps in public settings, such as coffee shops, to showcase how well heat pumps work and dispel any concerns potential users may have. More information on the Experience Clean Heat campaign is coming soon from NYSERDA.
- Finding a Visible Spokesperson: This priority did not advance. The RMAG is happy to explore if membership is interested.

Ramping Up to Meet Our Goals

Laura reviewed activities or programs related to *Ramping Up to Meet Our Goals*. Priorities discussed include:

- Connecting on Policy Goals: The RMAG coordinated guest speakers, like Greg Hale, Senior Advisor for Energy Efficiency Markets and Finance at NYSERDA, and Kara Saul-Rinaldi, President/CEO of AnnDyl Policy Group LLC., to provide membership with insights on evolving state and federal policy goals (see the June 2021 RMAG [meeting notes](#) and [presentation materials](#) for more). Through network building and engagement opportunities the RMAG has enabled these key discussions to continue offline.
- Seeking Nontraditional Partners: The RMAG membership and distribution list has grown to over 200 individuals representing participants from across the sector. Since late 2021 the RMAG has emphasized the importance of including nontraditional partners in the discussion, like M/WBEs located in Disadvantaged Communities (DACs) that are servicing Low-to-Moderate Income (LMI) consumers. The RMAG are undertaking a stakeholder assessment to identify opportunities to expand access to underrepresented stakeholders in the residential clean energy market and will update membership on these efforts in the future.
- Customer Engagement Playbook: Using breakout sessions, the RMAG held deep-dives into specific customer segments to identify opportunities and best practices for engagement. In November 2021 a robust discussion was held with Sahara James, Senior Sustainability Consultant at Kinetic Communities Consulting, regarding their experience as Campaign Director for [ElectrifyNYC](#), a clean heating and cooling program promoting equitable access to green technologies in the residential market run by the New York City Mayor's Office of Climate and Sustainability. For more on that discussion, including outcomes, see the November 2021 RMAG [meeting notes](#) and [presentation materials](#).
- Stacked Efficiency and Electrification Pilot (SEEP) Framework: Meeting ambitious residential clean energy and energy efficiency goals will require addressing numerous funding, financing, and deployment challenges. A multi-disciplinary member-led working group was convened, informed by a series of thirty expert stakeholder interviews. The result is a framework for a Stacked Efficiency and Electrification Program, designed to deliver multiple upgrades as a package (weatherization, electrification of space and water heating, and installation of renewables such as rooftop solar or community solar). The final framework will be published soon, but information on the group, including its [charter](#), is available on the NYSERDA RMAG webpage. This is a framework with guidance

for organizations or communities who may wish to establish such a program. A first-of-its-kind convening for NYSERDA, this exemplifies the unique collaborative opportunities the RMAG can provide.

- Workforce Development Forum: This priority did not advance. The RMAG is happy to explore if membership is interested.

The New Normal

Laura then walked the group through *The New Normal* priorities. Activities discussed include:

- Lower Touch Engagements / Post-Installation Data: NYSERDA addressed these priorities through a Remote/Virtual Audit Challenge. In collaboration with multiple private companies, NYSERDA has begun testing remote audits which will run throughout 2023.
- Peer-to-Peer Groups: The RMAG conducted a survey assessing group interest in early 2022, soliciting approximately 50 responses. Outcomes of that survey can be reviewed in the Q1 2022 RMAG [meeting notes](#) and [presentation materials](#) available on the RMAG webpage. Based on responses, NYSERDA decided that instead of developing a new peer-to-peer group to instead establish deeper relationships with existing groups, like the [Building Performance Contractors Association \(BPCA\)](#), by coordinating guest speakers and sharing connections.
- Standards of Interoperability: This topic focuses on various components of heat pump technologies that can work together in achieving energy efficiency improvements. This priority did not advance. The RMAG are happy to explore if membership is interested.

Laura concluded her presentation by offering several forward-looking questions for attendees to consider regarding future priorities for RMAG activities. She then introduced Courtney Moriarta, Director of Single Family Residential at NYSERDA, to present on policy and program updates relevant to NYSERDA's standing in the sector.

NYSERDA Policy and Program Update

Courtney Moriarta provided updates on federal and state policies and programs. Highlights include:

- The [New York State Scoping Plan](#), part of Climate Leadership and Community Protection Act (CLCPA) efforts, was published in January 2023. The plan details climate goal achievement implementation and includes the phasing out of fossil fuel systems in residential buildings, occurring first in new construction and subsequently in replacement of existing fossil fuel systems.
- The Public Service Commission (PSC), supported by the NYS Department of Public Service (DPS) is currently conducting a review of ratepayer considerations for the [Clean Energy Fund](#). The review will provide guidance on how funding will be directed, impacts will be measured, and the roles and responsibilities of key actors like NYSERDA and utilities. Once the public comment period on the NYS Scoping Plan closes, a more comprehensive plan may be released to guide this process.
- Governor Kathy Hochul's 2022 State of the State proposal for [2 Million Climate Friendly Homes](#) is in its final review and publication stages. The plan charts a path to 1 million

fully electrified homes in NYS and 1 million electrification-ready homes by 2030, including 800,000 homes in LMI communities. NYSERDA's supporting role in this effort will be clarified upon public release.

- The Federal Inflation Reduction Act (IRA) was passed in August 2022 and has a couple of key provisions for NYS:
 - 25C tax credits for qualified electrification upgrades allow up to \$3200/year per home for electrification and efficiency improvements (\$2,000 heat pumps and HPWHs, \$1,200 other upgrades). These credits will generally cover 30% of the installation costs, including labor and materials. The legislation does not include a lifetime cap on tax credits, meaning that the credits reset each year and can be used again. (See this [Fact Sheet](#) from non-profit Rewiring America for more information)
 - An allocation of \$317 million for NYS residential rebate programs. Specific details are expected from DOE in the upcoming months.
- The EmPower+ and Energy Affordability Guarantee programs address equity concerns when improving energy efficiency within homes. The EmPower+ program may receive [budgetary funding](#) to advance engagement of LMI customers. The Energy Affordability Guarantee program, if approved, is currently in development but would limit the maximum household energy burden to 6% of annual income for participants who install a heat pump, which would mitigate impacts on bills when switching from gas or other sources.
- A first-of-its-kind [NYS "cap and invest" program](#) was announced which could provide long-term funding for programs necessary to reach state decarbonization goals. 30% of this program's funds would go to the Climate Action Fund and 60% would go towards the Clean Energy Transition and Workforce.

Courtney then explained how residential incentive opportunities are impacting programs and financing sources. Topics reviewed include:

- NYSERDA's Comfort Home pilot program expanded its statewide open enrollment in Fall 2022 and is no longer limited to specific markets.
- The new EmPower+ program will launch in Spring 2023. EmPower+ combines the old EmPower program, which focused on low-income households, with the Assisted Home Performance program which targeted moderate-income consumers.
- The initial deployment of IRA rebates is expected in late 2023.
- A new Residential Energy Assessments effort will leverage lessons learned from the Remote Audit Challenge to develop a full virtual home energy use assessment solution for broad market use in early 2024.
- NYSERDA is scoping a statewide Market Engagement Platform to implement remote audits and foster strong relationships with consumers who can track their progress towards decarbonization over time.

Courtney continued the presentation by highlighting two key rebate programs within the IRA. Discussion highlights are outlined below:

- Home Efficiency Rebates (HOMES) appropriated \$159 million to NYS through 2031 for a performance-based rebate offer. Under this program, households that save at least 20% of household energy through whole-home retrofits are eligible for HOMES rebates.
- Home Electrification Rebates (HEEHRA) appropriated \$158 million to NYS through 2031 for a prescription-based rebate offer. Under this program, LMI households that purchase approved high-efficiency electrification equipment are eligible for HEEHRA rebates.

Courtney reviewed current NYSERDA program timelines and emphasized the importance of stakeholder engagement opportunities to inform the development of these programs. Specifically, the *Remote Audit Challenge demonstrations*, *IRA program planning*, and the *Market Engagement Platform* design processes are programs that NYSERDA is requesting stakeholder input for. NYSERDA is developing two channels for IRA program engagement: one specifically focused on LMI households and one for broader industry. If you have interest in participating or want to know more, please contact Scott Oliver, Program Manager, Equity and Affordability and Building Decarbonization at NYSERDA, via email at Scott.Oliver@nyserd.ny.gov.

The session concluded with a Q&A.

NYSERDA Policy and Program Update Q&A

Question Asked	Answer
Will the IRA rebates be administered through NYSERDA and if so, will qualifying technologies that are already administered by programs like Clean Heat integrate with these incentives?	Yes, the IRA rebates will be administered through NYSERDA from the state energy office. Those funds come directly to NYSERDA and we will be implementing them. We are looking for ways to leverage existing programs, both NYSERDA-administered and utility-administered, to enable consumers to combine those incentives and optimize their offer.
Right now, a lot of NYSERDA incentives are limited to those on municipal electric due to the SBC charge. Is there any insight on how IRA incentives enable NYSERDA to connect residents who pay into municipal electric but not the SBC charge?	This funding from the federal government will be open to all residents of NYS. It will open up more opportunities to residents who are in those municipal territories.
Does the 'hardship rule' apply to federal money administered by NYSERDA which severely limits money that can go to NYC?	We are awaiting guidance from IRA funds from DOE but will take this comment into consideration.

Inflation Reduction Act

After the Q&A, Courtney introduced Mark Dyen, Senior Consultant at Mark Dyen Consulting, to discuss core details of IRA rebate programs relevant to the NYS residential market, that are known at this time. Mark reviewed details on the High Efficiency and Electrification Home Rebate Program (HEEHRA), and the Home Energy Performance-Based Whole-House Rebates (HOMES) Program.

High Efficiency and Electrification Home Rebate Program (HEEHRA)

Mark reviewed the HEEHRA program, which is a rebate program specifically focused on building electrification equipment for LMI households. HEEHRA eligibility is currently limited to households making less than 150% of median household income, but the final DOE rules and NYS program design details are yet to be finalized. Differences between federal program definitions of LMI households was noted for its potential impact on market confusion.

Each piece of electrification technology is eligible for a rebate up to 50% of the installation costs, with a maximum rebate total across all electrification upgrades for the home or unit of \$14,000. Mark highlighted that the HEEHRA program supports electrical system upgrades, which is new.

Home Energy Performance-Based Whole-House Rebates (HOMES) Program

The HOMES program is a performance-based system promoting energy efficiency through a either a modeled energy savings (threshold of 20% energy savings) or measured energy savings (threshold of 35% energy savings) pathway.

HOMES Program Pathway	Key Questions
Modeled Energy Savings: A similar modeling approach to those undertaken during standard building energy assessments.	<ul style="list-style-type: none">• What constitutes an adequate model?• Do you need actual energy bills and consumption data in your model to make it valid?
Measured Energy Savings: Performance-based monitoring of realized energy savings as the project develops.	<ul style="list-style-type: none">• How do you measure energy savings over time when contractors want to get paid right now?

Conclusion

With much of the rulemaking and defining of key terms still outstanding, NYSERDA will have to develop tools to help contractors and consumers understand what these programs are and how to benefit from them. He ended his presentation by noting that while you cannot stack federal benefits, state benefits can be combined with IRA programs which can enable uniquely compelling terms in states like New York with a significant number of available programs.

Inflation Reduction Act Q&A

Mark then opened it up for Q&A on the HOMES and HEEHRA programs.

Question Asked	Answer
Is the AMI calculation based on statewide income averages?	We believe that will be up to the states to determine, but we are awaiting further rulemaking from DOE.
For a multifamily building that is owned by a landlord that is not LMI, if the tenants meet LMI income levels is the building eligible?	If the building has 50% or more LMI occupancy they should qualify for whole building rebates, but we are awaiting further guidance from DOE.

Inflation Reduction Act: Engagement Activity

Trevor Reddick, facilitator for the meeting, transitioned participants to an engagement activity using PollEverywhere. Participants were asked to respond to on-screen survey questions providing feedback on outstanding questions and needs related to the IRA programs reviewed. Courtney and Mark provided commentary and insights on responses received.

Question 1: Given NY's policy objectives to reach 2 million electrified or electrification-ready homes by 2030, what is the best use of HEEHRA rebates to support those goals?
Address building stock barriers to implementing work
Agree with importance of including other needed upgrades-like panel boxes
An incentive program designed by the key market actors who will implement it (contractors, distributors, manufacturers) with clear policies and processes to participate that aligns with their existing businesses
Buy down project cost to minimize amount financed for homeowners
Clean customer engagement plans and coordination with utility programs - leverage utility data to best identify and engage customers who benefit most from the program
Do not restrict use
Ensure order of operations followed
Heat pumps and upgraded electrical
Increase income limits; add on \$ for repairs prior to electrification
It's hard to say because some homes are so leaky they will never be tight enough for a heat pump. If some of that money could somehow go towards community geothermal (I feel like it is not designed that way) that would be best and a most economical way of getting heat pumps to more people, since a ground source heat pump can overcome leakiness more than an air source heat pump which is lower hanging fruit.
Make it easy to get the rebates! Limit the amount of paperwork required.
Outline clear pathways to realize these rebates
The more that direct costs can be covered the better--even better if rebates go directly to customers rather than through contractors (who would have to wait for them and carry that debt)
Question 2: What are the key considerations NYSEDA should take into account when developing an implementation plan for HOMES?
Apply more of these rebates to new builds. There is a real penalty paid by those wanting to build new responsibly.
Best suggestion is to make a easy, fillable calculator that will allow contractors to get pre approved for funding. Funding that may or may not be there at the end of the project from savings will be heavily discounted by contractors
Build into current programs so easy for contractors to offer these benefits with same or simpler program workflows
Encourage a national coordination center to coordinate all of this across the country
I'm still confused on how it works at this point...But the slides are still helpful.
leveraging utility data and developing a clean customer engagement plan
Needs to be easy to sell to the customer; predictable about which projects are eligible or not
Order of operations, efficiency first
Tying payments for load reductions to payments from ISO or other permanent load reduction fee structure. This would allow for 3rd party ownership of measured performance and lower performance risk.
Question 3: NYSEDA is assessing a variety of approaches to satisfy the modeling requirement of the HOMES program. What key considerations should be taken into account?
Approve the PHPP or WFI passive modeling packages so we don't need to do the modeling twice!
Back modeling up with measured so it's not gamed
Consider that most models overestimate savings and account for that

Don't know enough to respond, but would like to.
Include community solar systems
Include storage
Keep it simple so more funds go to the work, and less work to administering the approach
Monitor actual impact on utility bills and use to guide program development
Need to figure out how monitoring utility usage changes as one converts fuel types
Primary concern is increased load on the grid from the move to electrification. So any measurements should specifically quantify (and pay for) successful grid load managements.
Remember oil and propane and wood energy use data.

Question 4: Considering many NYS homes use a combination of fuels to heat and power their homes, including non-metered fuels that utilities do not make data readily available to NYSERDA for, how should we adapt BPI-2400 to meet the HOMES modeled path requirements?
A blower door test would go a long way to setting a benchmark for usage in general
Allow for some proxies to be established when data cannot be gathered, such as small-shop oil companies
Get data access permission from owners so this is not a burden.
Have PSC make utilities share data
Just like EmPower NY via NYSERDA allow folks to honestly state how many cords they use a year, etc.
Sharing utility data would be helpful, adding wood or other heat sources shouldn't be too hard.

Preliminary Priority Setting Session and Closeout

Trevor Reddick then moved meeting participants to a priority setting exercise. To advance the 2023-2024 priority-setting process, participants were asked to identify areas of highest need to effectively scale the residential market.

Closeout Question: Based on what you have heard today, what are the highest priorities for the industry to focus its attention on to advance the residential market?
Balance the challenges of fixing the grey grid and desire to fix grey buildings not happening fast enough.
Build out robust energy contractor network, statewide contractor training and support, access to Nysesda contractor membership
Community geothermal using pre-existing natural gas lines and expanding them to reach rural areas. This can be with existing utilities, but does not have to be. Somehow making Geothermal more accessible because they will last a lot longer than air source heat pumps.
Continue to focus on quality installations happen with rapid increase in adoption rates. Keep demand loads down.
Developing additional perpetual funding streams for electrification so the retrofit industry can respond and expand with certainty and confidence to accommodate the 27yr timeline of this challenge
Easy access to rebates and financing for customers
Ensuring information about incentives is clearly communicated, available, and understandable
Include new construction!
Pick up more contractors and support small companies with added administration needed to access this funding for residents/businesses.
Proactive outreach and feedback from the key market actors (contractors, distributors, manufacturers) to inform the design and deployment of these IRA programs to ensure they are accessible, easy to use, and accomplish NYSERDA's goals
Reduce the paperwork burden. Provide easier and larger financing options.
Work to overcome lots of misinformation in the marketplace already

After the preliminary priority setting session was complete, Trevor reviewed Action Items for RMAG membership and thanked participants for their active engagement. He reminded attendees to reach out to resmarket@nyserda.ny.gov if they would like to join the RMAG Listserv, and can find more information on the group on the [NYSERDA RMAG webpage](#).

Trevor then adjourned the meeting.

Appendix A

RMAG Process Diagram

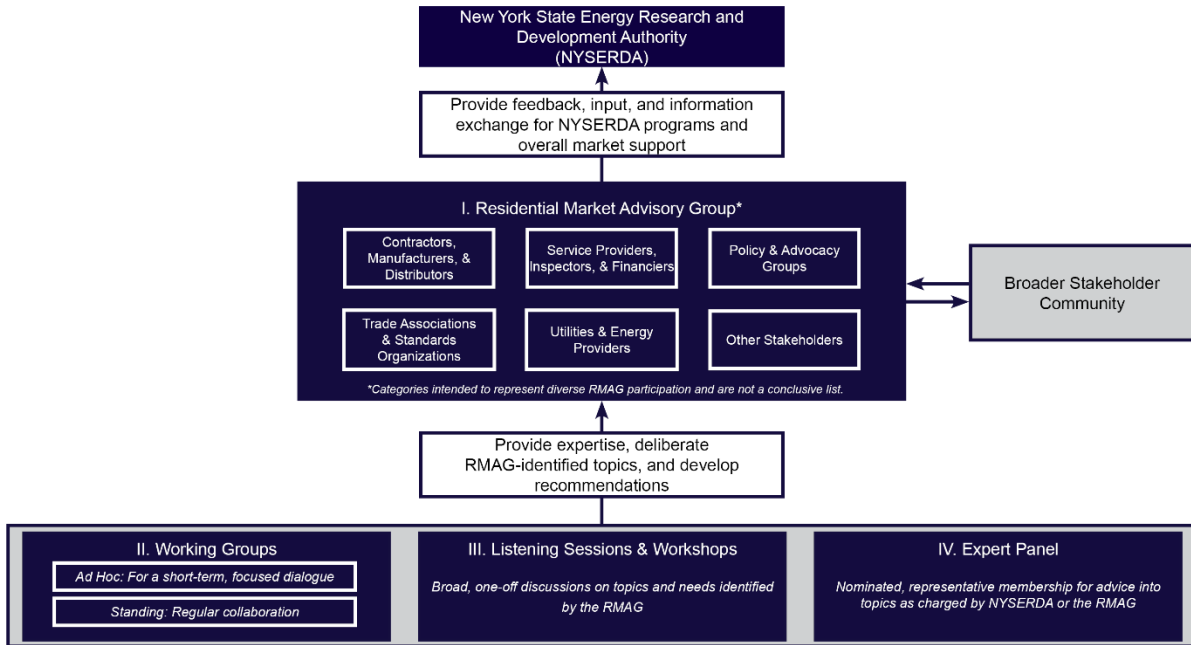


Figure 1: Information flow between stakeholder groups