

NYSERDA Residential Market Advisory Group (RMAG) Quarterly Virtual Meeting

March 23, 2022

Meeting Summary

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RMAG Meeting Q1 2022 Meeting Summary Wednesday, March 23 at 10:30am ET

Background

On March 23, 2022, the New York State Energy Research and Development Authority (NYSERDA) hosted a virtual meeting of the Residential Market Advisory Group (RMAG). The meeting provided updates on activities related to RMAG priority items since the previous meeting, held in November 2021.

The Q1 2022 RMAG meeting was convened to focus on active conversations over RMAG and broader residential market priorities. Presentations from NYSERDA leadership and program staff were scoped with engagement activities providing participants the opportunity to identify individual market interests and connect them with State activities and goals for clean energy and energy efficiency adoption in the residential sector.

In total, 48 individuals attended the meeting, including 8 NYSERDA staff.

Meeting Agenda

- Housekeeping and Ground Rules
- Residential Market Advisory Group (RMAG) Overview
- New York State Policy and Priority Updates
- RMAG Activity and Priority Item Updates
- Heat Pump Planner Update
- Wrap Up

Housekeeping and Ground Rules

Laura Geel, Program Manager for Single Family Residential Operations and Market Development at NYSERDA, opened the event by thanking attendees for their participation.

Trevor Reddick, facilitator for the event from Kearns & West, reviewed the Agenda and Ground Rules for the meeting. He then conducted an icebreaker activity with participants, where they were asked to introduce themselves, their organizations, and one objective for 2022 via the chat function. The facilitator read responses out loud, tying responses to RMAG priorities and upcoming presentations.

Residential Market Advisory Group (RMAG) Overview

Trevor then reviewed the RMAG's Mission Statement and Objectives. The RMAG brings 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. The group's process diagram, reflecting its structure and activities, is attached here as Appendix A.

NYS Policy and Priority Update

After completing the RMAG Overview, Trevor introduced Courtney Moriarta, Director of Single-Family Residential at NYSERDA, who presented on updates to state policy and priorities since the last RMAG meeting in November 2021.

Courtney's presentation reviewed the New York State Climate Action Council's Draft Scoping Plan, Governor Kathy Hochul's State of the State address, and highlighted ways for stakeholders to participate in ongoing state policy discussions for the residential market.

December 2021: NYS Climate Action Council Draft Scoping Plan

Courtney provided participants with a short overview of the New York State Climate Action Council and the Draft Scoping Plan. To fulfill provisions of the state's Climate Leadership and Community Justice Act (CLCPA), the NYS Climate Action Council released its draft scoping plan in December 2021. Courtney explained the scoping plan as a first-of-its-kind comprehensive decarbonization plan. Covering all sectors, including buildings, it represents a major step toward making New York the leader in climate and decarbonization goals.

Courtney briefly reviewed high-level elements of the scoping plan, including proposed milestones affecting the residential sector. They emphasized that under all scenarios, the vast majority of current fossil fuel customers will transition to electricity by 2050. Milestones highlighted in the presentation include:

- 2024: End all fossil fuel use in single family homes/low rise apartments and stop connecting new gas customers
- 2027: Ban on fossil fuel in new construction
- 2030: Ban on replacement of fossil fuel equipment in existing homes
- 2035: Retire fossil fuel equipment in large buildings (50,000 sq ft and up)

Courtney then put out a call to action for RMAG members to familiarize themselves with the plan, engage their networks, and to provide feedback before the end of the public comment period on <u>June 10, 2022</u>. **To read the draft scoping plan and provide comments please see**: https://climate.ny.gov/Our-Climate-Act/Draft-Scoping-Plan

Participants were made aware of the public hearing schedule for the scoping plan. Meetings will occur through April and May 2022 and will occur both in-person and virtually. For more information on draft scoping plan public hearings and meeting materials please see: https://climate.ny.gov/CAC-Meetings-and-Materials

January 2022: Governor Kathy Hochul's State of the State Address

Courtney then reviewed Governor Kathy Hochul's State of the State Address, including the announced 2022 residential housing policy agenda and statewide housing plan. Quoting the State of the State book, Courtney expressed that Governor Hochul's agenda "sends an unmistakable signal to the New York Market, the nation, and the world that the future of buildings must be decarbonized."

Policy Agenda from the State of the State

Courtney discussed residential building policy initiatives announced during the State of the State and their significance for state goals. Agenda details and goals discussed include:

- 2030 Goal of Two Million Climate Friendly Homes: This goal includes one million electrified homes and one million electrification-ready homes. Courtney clarified that the definition of 'electrification-ready' is still under consideration but will include things like efficiency and weatherization improvements. The initiative targets at least 800,000 Low-to-Moderate Income (LMI) households and will be designed in collaboration between NYSERDA, NYS Homes and Community Renewal, NYS Department of State, and the NYS Department of Public Service.
- <u>Increase Rate of Electrification</u>: By the end of the decade, the state aims to increase the rate of electrification of homes <u>tenfold</u> from current rates.
- <u>Zero Emissions New Construction</u>: By 2027, the state aims to have all new construction be to a zero-emissions standard.
- Enhance Appliance Efficiency Standards: Informed by interagency collaboration and nationwide efforts New York will seek to upgrade appliance efficiency standards to align with state climate goals.
- Level the Playing Field for Clean Energy: The State wants to equalize opportunity for clean energy alternatives to natural gas. These efforts will include seeking an end to the "100-foot rule." Governed by 16 NYCRR §230.2(c), (d) and (e) of the Public Service Commission's regulations, the provision requires a gas utility to provide an applicant with a minimum length of main and service line extensions at no cost to the applicant under its "duty to serve."

Statewide Housing Plan

Courtney then reviewed the Statewide Housing Plan announced during the State of the State. Recognizing the disproportionate impact of pollution on historically disadvantaged communities, the plan prioritizes access for all New Yorkers. Supported by the housing capital plan, the initiative will electrify low-income homes through the following mechanisms:

- Allocation of \$25 billion dollars for a five-year housing plan led by NYS Homes and Community Renewal
- Goalsetting to target creation and preservation of 100,000 affordable homes
- Allocation of \$250 million dollars to directly support electrification of homes

Future initiatives being considered include all-electric high-performance equipment for heating, high-performance airtight building envelopes, and support for energy efficiency best practices like geothermal heat pumps, onsite solar panels, and heat recovery ventilation.

Policy Next Steps and Important Dates

Courtney closed their presentation by detailing upcoming important dates for RMAG members to track as they continue the conversation over clean energy and energy efficiency policy for the residential sector. Dates identified include:

- March 31, 2022: State Legislature budget bill due
- April/May 2022: CAC Draft Scoping Plan public hearings

- June 10, 2022: CAC Draft Scoping Plan public comment period ends
- EOY 2022: 2 million Homes inter-agency plan and budget request due
- Early 2023: CAC Final Scoping Plan due

NYS Policy and Priority Update: Discussion

Question and Answer

After Courtney's presentation concluded, Trevor facilitated a brief question and answer period. Questions asked and summaries of responses provided by Courtney are provided below.

Question 1: Could you speak to the LMI requirement – what is being considered as ways to accelerate low-moderate income adoption?

Courtney: NYSERDA and the state are pursuing program revisions to enhance access and improving the budget to reach more homes. The state is engaging in active interagency collaboration including Homes and Community Renewal, the Office of Temporary and Disability Assistance, and others to help combine funding sources to meet needs. Focus on the immediate years are electrification-ready homes so that when a new heating system is needed, alternative heating implements like a heat pump can be installed.

Question 2: What investment and training for our workforce is required to meet the building electrification challenge?

Courtney: There is a Workforce Development team at NYSERDA working to ensure a trained, qualified workforce is available in the market. We are pursuing training programs, incentives, internship programs, and collaborations with Department of Labor on job fairs. We are always looking for new ideas to help build a talent pipeline in New York.

Question 3: Are district heating solutions part of the planning process for building electrification?

Courtney: Absolutely. NYSERDA is actively looking at demonstration projects and exploring feasibility studies for district geothermal opportunities. We need to double down on making investments in this area and a growing group at NYSERDA are exploring the opportunity.

Question 4: What's the best way for people to get involved in this process?

Courtney: For the scoping plan, please use the <u>website link</u> to the Climate Action Council public hearings and attend. For our two million homes initiative we're still figuring out who will be active in the development of that plan within agencies. There will be stakeholder engagement opportunities but those have not been defined yet.

Facilitated Engagement Activity: Polling on Participant Interests

After the question-and-answer period, Trevor transitioned the group to a facilitated engagement activity on the topic of NY Policy Updates and Priorities.

Using the interactive platform PollEverywhere, participants shared live responses to prompts exploring their NY policy interests, how their organizations efforts align with the policy updates presented, and how the RMAG can best support the market.

Questions, responses, and totals for responses received are detailed below.

Question 1: Which of these items is the most significant/exciting to you?

Responses Received (Alphabetical Order):

2 million homes

2M homes

Budget for 2 million home challenge

Considering the unique needs of different areas of NY.

Energy efficiency

Energy equity and energy resiliency.

market rates and economic impacts on the industry

Need to track municipal planning boards who are considering these timelines when approving/rejecting projects under their respective jurisdictions

Potential for jobs for people who have been excluded from financial benefits of society to help improve efficiency of LMI homes

Reaching 2 million homes

Workforce development, LMI focused for ramp-up

Workforce development.

Total Responses 12

Question 2: Which efforts supporting the latest New York State policies and goals would you like to see prioritized by the RMAG?

Responses Received (Alphabetical Order):

Can the supply chain meet the goals of the program?

Energy efficiency and dual fuel technology

Energy efficiency to achieve electrification goal

Energy equity, affordability, and resiliency.

Ensuring there is a consumer education piece for equipment use

Getting the entire supply chain on board with the State's goals

importance of weatherization to ensure heat pumps are appropriately sized

Increasing market rate participation in bldg electrification

Planning Boards are not always deep thinking and forward oriented other than to remove future liabilities that could fall upon their respective municipal jurisdiction. These boards need to be informed, so they can tell developers about avoiding retrofits due by 2027-2030

planning for electrification of different home types (rural/suburban/urban)

Removing fossil fuel subsidies. Create low interest loan products.

Workforce training and support for BIPOC entrepreneurs

Total Responses 12

Question 3: As you and your organization work to support achievement of announced plans and priorities, how can the RMAG best support you?

Responses Received (Alphabetical Order):

Include boots on the ground stakeholders in designing practical approaches

Prepare a response and a system for pushing back against ideology differences from communities, laborers, elected officials, codes departments, and planning/zoning boards Keep lines of communications open and provide regular updates.

bridge funding gaps		
Workforce development. Consumer education for both LMI and market rate consumers.		
RMAG working groups working to provide input on planning efforts		
Supporting contractors to do the work with sufficient funding for programs to help lmi		
Total Responses	7	

RMAG Activity and Priority Item Updates

Trevor then introduced Laura Geel to provide updates on RMAG priority activities since the last quarterly RMAG meeting in November 2021. Laura discussed progress and updates for activities that had been completed, were in-progress, and had yet to begin. This included discussion of ongoing Working Groups, Expert Panels, and Listening Sessions.

Completed Priorities

Laura reviewed priorities whose work has completed since our last quarterly meeting and how those efforts helped inform the broader residential conversation, NYSERDA residential programming, and more. Priorities covered under this section include:

- Energy Use Benchmarking: During our November 2021 Q1 RMAG meeting the group hosted a breakout session on the topic of energy use benchmarking. Participants used an interactive Miro board to share interests, concerns, and lessons learned in the evolving sector. NYSERDA staff were present during the discussions and have used the information to inform their efforts to expand innovation and market development in the space.
- <u>Establishing an Ally Network</u>: NYSERDA stood up the Clean Heat Connect Network to share resources for HVAC contractors through their contacts with manufacturers and distributors. This is part of the NYS Clean Heat Initiative, a statewide investment and coordinated effort delivered by NYSERDA, utilities, and a robust network of contractors, to drive the awareness and adoption of heat pumps in buildings. For those interested in exploring further, you can reach out to Michael Courtney, Project Manager at NYSERDA, at <u>michael.courtney@nyserda.ny.gov</u>
- <u>Peer-to-Peer Group Discussions</u>: Early in the pandemic, RMAG members indicated interest in pursuing peer-to-peer group discussions to help adapt to the "new normal." RMAG leadership worked with the Building Performance Contractors Association and the RMAG facilitation team from Kearns & West to create a survey process to evaluate the need. Details of that survey were presented later in the meeting.

In-Progress Priorities

Laura then walked the group through in-progress activities. Priorities discussed include:

Normalizing Heat Pumps: This has been moving forward through experiential
demonstrations to enhance customer awareness, customer testimonials to promote
adoption, community meetings for knowledge exchange, and the RMAG's Stacked
Efficiency and Electrification Framework Working Group. The Working Group brings
residential experts together to create a framework for scalable whole-home retrofit
programs that combine electrification-ready, electrification, and distributed renewable
energy installation. Meetings are underway and if you are interested in participating in

the group please reach out to the group's facilitator, Trevor Reddick, at treddick@kearnswest.com.

- Ramping up to Meet our Goals: This priority has moved forward as a whole market process. Residential programs have forged partnerships with community organizations to enhance workforce development efforts and clean heat adoption rates. They have hosted workforce development forums to scale the installer labor market needed to meet goals. They are exploring technologically enhanced decision making using post-installation data and lower-touch engagement strategies, primarily through Program Opportunity Notice 4423: Remote/Virtual Energy Audit Challenge which has closed and will announce awardees in 2022. As policy goals evolve residential programming is working with NYSERDA's marketing partner to develop common language to discuss energy efficiency and clean heating technologies. And to promote customer engagement they are hosting discussion groups and creating an inventory of public information on energy efficiency for LMI communities.
- Quality Assurance Root Cause Analysis Expert Panel: This group, comprised of
 residential installers from across the state, provides expert insights on how to improve
 quality assurance and quality control compliance rates for NYSERDA residential
 programming. Participants recently hosted a call on the topic of LED install nonconformances and provided recommendations that informed a program announcement
 sent to all program contractors. NYSERDA is also considering programming implications
 from these discussions and look forward to exploring these topics further.

Not Yet Started Priorities

Laura finished by reviewing priorities whose work has not yet started since our last quarterly meeting. Priorities covered under this section include:

 <u>Standards of Interoperability</u>: The complexity and incompleteness of hardware and software integrations are curtailing the efficiency and clean energy transition. The RMAG is exploring ways to support the creation and popularization of standards of interoperability for residential building technologies. If you are interested in discussing further, please feel free to send an email to resmarket@nyserda.ny.gov.

Peer-to-Peer Groups

Once Laura completed updates on RMAG activities, Trevor turned the discussion to review of the Peer-to-Peer Groups priority and a recent survey done to explore RMAG interests. He introduced Cara-Leigh Battaglia, Executive Director of the Building Performance Contractors Association, Cara-Leigh worked with Laura and the facilitation team to develop the survey and co-presented the survey and findings with Trevor.

Peer-to-Peer Group Interest

Peer-to-Peer Groups were initially identified by RMAG participants as an interest in the context of shared learning on how to adapt business operations to the 'New Normal' of COVID. That interest later developed into a broader RMAG interest, and we sought to learn more about the need. To understand and advance this goal, a needs assessment was conducted to clearly identify group interests in Peer-to-Peer Groups and inform that activity structure. The

overarching question was, "What are people's needs from a peer-to-peer group activity and what forum exists to host those discussions?" The decision was whether this required creating new forums for desired discussions or if 'matching' people with the appropriate forum could address their interests.

Peer-to-Peer Group Survey

The survey, delivered to RMAG participants in January 2022, featured ten questions intended to identify interests and shared understanding of existing forums. In total the survey received forty respondents representing organizations and sectors across the residential market.



Interests in a Peer-to-Peer Group

Participants were asked, "What characteristics of other participants do you consider to be part of your peer group?" The top 3 most common responses showed that participants consider companies that have the same mission, offer the same products/services, and counterparties with the same role in the company as peers.

Participants also responded positively when asked if they were interested in participating in a peer-to-peer group. In total 61% of respondents indicated positive sentiment about participating in Peer-To-Peer groups and only 8% of respondents reported negative sentiment.

Participants were asked to explain how they felt about conducting a peer-to-peer group process with competitors. Factors noted as significant for willingness to participate included stated commitment to shared goals, the presence of a facilitator, participants signing non-compete clauses, and serving customers in non-overlapping geographies.

Topics for Peer-to-Peer Groups

From the survey results, priority topics for peer-to-peer groups identified by respondents include:

- 17 individuals responded, "New technologies".
- 16 individuals responded "Industry-specific issues".
- 14 individuals responded, "Technical assistance (building science)".
- 12 individuals responded, "Hiring and retaining workers".
- 9 individuals responded in multiple categories such as "Business operations", "Customer recruitment", and "Financing".

Interest in different topics changed by the type of organization responding. For instance, identified interests in New Technologies represented 30% of government respondents, 33.3% of manufacturer respondents, and 33.3% of software company respondents. Comparatively, residential contractors were the majority respondents indicating interest in exploring topics of Business Operations, Workforce Development, and Industry-Specific Issues.

Peer-to-Peer Survey Results: Forums and Opportunities

Cara-Leigh presented on the BPCA's existing forums and how they aligned with RMAG interests. While originally scoped for building performance contractors the group's charge has expanded to address the full residential market.

Cara-Leigh flagged the BPCA's NY Energy Efficiency Policy Group, Workforce Development Group, Energy Advisory Peer Group, and ad hoc Work Groups as different formats to explore. In particular, the pending Energy Advisors Peer Group was flagged for its ability to incorporate RMAG interests in: Business Operations, Customer/Consumer Issues/Sales/Market, Finance, Technology, Industry Issues and Resources.

If you are interested in learning more about the guidelines and experience, frequency and format, and other details on evolving BPCA forums, reach out to Cara-Leigh at execdirector@bpca-nys.org.

Peer-to-Peer Groups: Virtual Engagement Tips and Recommendations

Trevor concluded the presentation on peer-to-peer groups by exploring some tips and recommendations for participants to maximize the value they get from participating in virtual forums. Topics discussed include:

- Research, Research, Research: Review collaborative tools and the platform being used in advance of the discussion. This will enhance your ability to engage and minimize time spent during the event familiarizing yourself with the platform.
- <u>Be Present</u>: Limit your distractions and distractions for others. Keep your camera on when feasible to keep participation high. If you must step away or deal with a distraction, turn your camera off and communicate your absence via the chat.
- <u>Formalize Roles</u>: Meetings are best when every participant takes an active role in moving forward the proceedings. If you're coordinating a call, identify someone to take notes, track Action Items, provide technical support, etc. If no one is taking notes or tracking Action Items, volunteer!
- Be Gracious: Participating can be hard! Don't hog the floor to allow for a dialogue instead of a monologue. When you're not speaking consider putting yourself back on mute it can show others that you're in listening mode and a good reminder to yourself to give space for others to participate! If there's a lot of participation and you want to stay in the conversation, use the chat to avoid crosstalk.

Peer-to-Peer Groups: New Technologies Discussion

Trevor then transitioned to a participatory engagement activity to gauge group perspectives on the "New Technologies" topic. Using PollEverywhere, participants responded to prompts exploring how they get information on new technologies and how they use their peer networks to exchange that information. Questions posed, responses, and totals are detailed below.

Question 1: What are your most trusted sources of information for new technologies?		
Responses Received (Alphabetical Order):		
Academic Journals		
conferences		
Cornell Cooperative Extension		
Demonstrations		
DOE		
Industry associations and Government Orgs like NYSERDA and DOE		
Industry resources		
Internet		
internet		
Manufactures product information and trade publications.		
NYSERDA resources, conversations with contractors and NYSWDA, and cursory internet research of		
manufacturer sites		
Other industry professionals		
recommendations from comparable businesses		
trade associations		
Total Responses	14	

Question 2: Do you share knowledge and experience with new technologies	to your peer
network? Formally or informally? How?	
Responses Received (Alphabetical Order):	
BPI has a product listing program	
informal	
informally	
Informally and networking at industry events, meetings and conferences	
Regularly standing meetings, minutes to said groups, presentations, and lots of inform	mal
conversations along the way	
yes, and we participate in pilots and report back	
yes, "water-cooler" informally	
Yes, informally through conversations	
Total Responses	8

RMAG Activity and Priority Item Updates Closing

Laura ended the RMAG updates section with a call for participation. If participants have ideas on how to move priorities forward, or if participants are interested in championing efforts, they can learn more about RMAG activities on the RMAG webpage and can reach out to Laura at resmarket@nyserda.ny.gov to discuss opportunities further.

Heat Pump Planner Update

Trevor then introduced Michael Courtney, Project Manager, Single-Family Residential at NYSERDA, for a presentation on updates to the Heat Pump Planner. Michael provided an overview of the Heat Pump Planner as it exists and explored intended updates to help participants understand how this resource can be used in their work.

What is the Heat Pump Planner?

The Heat Pump Planner is a resource for consumers interested in understanding clean heating alternatives. The planner provides an overview of heat pump technology, includes detailed analysis of different heat pump technologies functionality, informs consumers on how project decisions influence cost considerations, and explores relative suitability of heat pump technologies by home type.

The planner was developed collaboratively through a series of consumer interviews, contractor interviews, and discussions with subject matter experts. It offers twelve distinct "plans" for consumers to consider in a "choose your own adventure" format. Users are tasked with selecting their home type and their existing heat distribution system to determine the most appropriate plan for their home.

A PDF version of the planner is available via NYSERDA's <u>Heat Pump Planner webpage</u>. Michael emphasized that the PDF is suitable for contractors, customers, and outreach campaigns to use for sales and consumer awareness purposes. NY Clean Heat Contractors are also eligible to have their logo appended to physical copies for consumer-facing purposes. If interested, reach out to Michael at <u>michael.courtney@nyserda.ny.gov</u>.

Michael announced that NYSERDA is developing a web-based version expected to launch in Q2 2022. The web-based version will be more interactive, feature digital media content like videos and roll-overs, and present materials in an easy to consume format.

To showcase the diversity of information available in the planner, Michael walked participants through several examples. He shared plans for a Ground Source Heat Pump in a One-story Home, a Ductless Heat Pump in an Apartment, a Multi-zone Heat Pump in a Townhome, and a Ducted Heat Pump in a Manufactured/Mobile Home. For more detail on examples showcased, please refer to the PowerPoint slides from the Q1 2022 RMAG Meeting available with this meeting summary on the <a href="https://www.nysen.com/nysen.c

Question and Answer

After Michael completed their presentation, Trevor facilitated a brief question and answer session for meeting participants. Questions asked and Michael's responses are noted below:

Question 1: What kind of information might a contractor want to share in advance of sending along a copy of the Heat Pump Planner?

Michael: Depends on the contractor's business model and how they want to work with customers. This can be a handout that you would want to send to someone who knows a little

about heat pumps to begin with. You can guide them to the <u>NYS Clean Heat website</u> that has info on heat pumps on there if they are completely new to the concept. We want this to help contractor answer questions, make recommendations, and engage with customers more substantively.

Question 2: Are there plans to add additional home types or heat pump systems in the future?

Michael: We are looking at adding different ground-source systems connected with ductless systems for one-story and two-story homes. Other than that, we have another pattern under development for heat pump water heaters that will talk about pros/cons/considerations that will come out in 1-2 months. We are open to ideas if there is a gap.

Question 3: Is there a section for discussion of common misconceptions about heat pumps? For instance, cold weather efficiency?

Michael: We have not used this address pros/cons. We haven't used it as a myth-busting tool. There are some other customer-oriented resources we're working on through Clean Heat Connect (short videos to address those issues).

Wrap Up

After Michael completed their presentation, Laura moved participants into the meeting wrap up. She reminded participants of the Clean Energy for Homes Conference and Trade Show scheduled for June 1-2, 2022, in Saratoga Springs, New York. The event, co-produced with the Building Performance Association, features two full days of education, networking, and business growth opportunities. Each year, this event draws approximately 300-400 contractors and weatherization professionals from NY state and surrounding areas. For more information on the event, participants should go to: https://events.building-performance.org/regional

Laura then closed the meeting, thanking participants for their insights and participation.

Appendix A RMAG Process Diagram

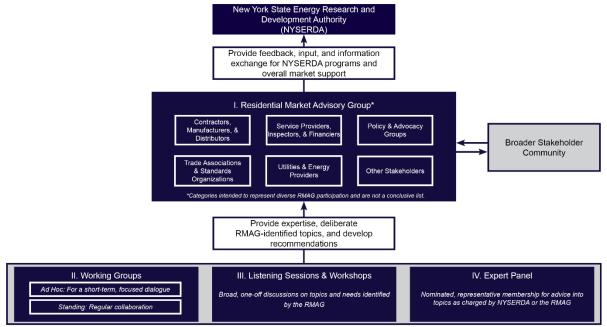


Figure 1: Information flow between stakeholder groups