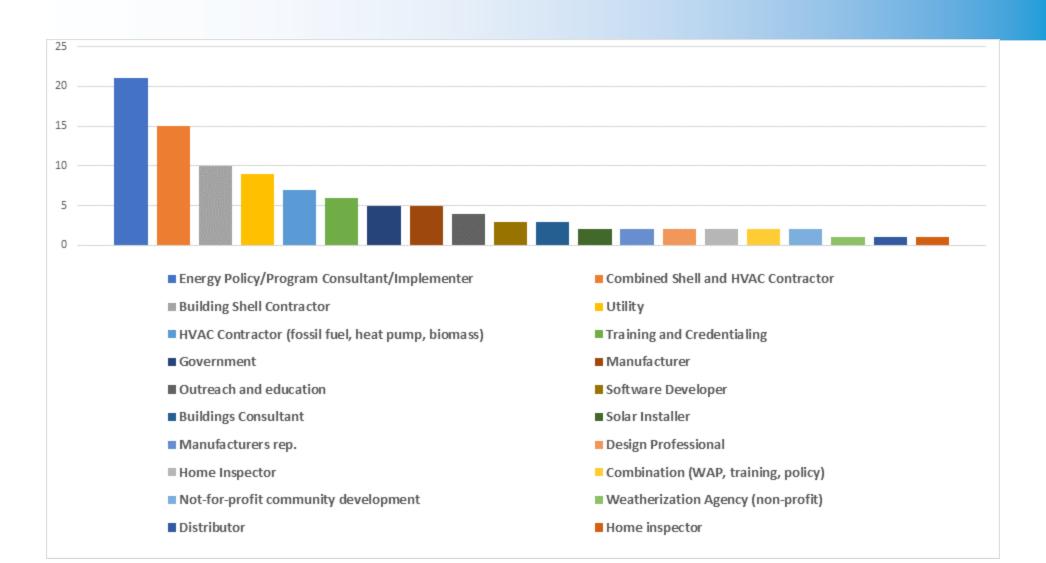
Ramping Up to Meet Our Energy and Equity Goals

Residential Market Advisory Group Breakout Session
October 8, 2020



Who's Here



Objectives for Today

- Discuss issues, challenges, and opportunities for the residential market
- We will aim to identify actionable items for next steps
 - NYSERDA actions
 - Participant-driven activities
 - Short term early wins
 - Longer term plays
 - Other

Guidelines/Overview:

- Focus on the market, not programs
- NYSERDA/Kearns and West roles are to facilitate discussion and help synthesize ideas
- First Hour: NYSERDA Facilitated Discussion
- Second Hour: Kearns & West Compression Exercises
 - Sort ideas into categories
 - Distill actionable items for next steps

Ramping Up to Meet our Energy and Equity Goals



New York's Residential Market

5 million single family homes 3.5 million built prior to 1970

Fully decarbonizing our single-family housing stock will require weatherizing homes at a rate of 320 per day and converting 456 homes per day to heat pumps or net zero carbon fuels over the course of 30 years.

Every. Single. Day.

Defining "Scale"

- Approximately 2.5 Million homes would test at 10 ACH50 our higher
- At least 1 Million homes need basic insulation upgrades
- At least 650,000 homes have single pane or single pane with storm windows

Starting full-speed in 2021 would require:

- A 5-fold or more increase in annual heat pump sales over 2018 shipments
- Increasing our pace of weatherizing homes by an order of magnitude
- Upgrading windows in more than 22,000 homes annually



CLCPA's Equity Provisions – Investing in Disadvantaged Communities and Populations

"Disadvantaged communities shall be identified based on geographic, public health, environmental hazard, and socioeconomic criteria, which shall include but are not limited to:

- a) Areas burdened by cumulative environmental pollution and other hazards that can lead to negative public health effects.
- b) Areas with concentrations of people that are of low income, high unemployment, high rent burden, low levels of home ownership, low levels of educational attainment, or members of groups that have historically experienced discrimination on the basis of race or ethnicity.
- c) Areas vulnerable to the impacts of climate change such as flooding, storm surges, and urban heat island effects."

Disadvantaged communities are to receive no less than 35% of the overall benefits of spending on clean energy and energy efficiency programs, projects or investments.

- Climate Justice Working Group: within DEC and includes NYSERDA, DOH, DOL, and 9 Environmental Justice reps (advises Climate Action Council)
- ➤ Criteria developed by CJWG based on input from 6 public statement hearings and published for public comment on DEC website
 - Considerations include available data and methodology for defining and applying DC criteria

Scaling Up to Meet Our Energy Goals

- > With an aim to decarbonize 7 million homes in 30 years, what market shifts are required to enable rapid scaling of energy efficiency and clean energy services?
- > How do we work together to accelerate adoption of the measures and technologies needed?
- > What are things you can do in your business to scale up and meet our energy goals?

Pivot to Decarbonization

- > Our focus in battling climate change has shifted our thinking from simply reducing energy consumption to decarbonizing energy production and end uses. What does this mean for your business or industry?
- > How will we need to treat homes differently?
- > What technologies or market support is needed?
- > What messages will be most impactful to persuade supply chain market actors and consumers to "buy in" to this effort?

Equitable Access to Clean Energy Solutions

- > How do we make sure our decarbonization efforts are equitable across all communities and market segments? What considerations do we need to account for to meet our equity goals?
- > How can we make sure low-income or otherwise disadvantaged communities are able to benefit from the clean energy economy and state investments?
- > Are there any examples of companies who have implemented successful strategies to engage with disadvantaged communities that can be shared and replicated?
- > How can we partner with you to ensure a more equitable process?

General Thoughts

- > What lessons learned can you share with other stakeholders?
- > What barriers or missed opportunities have you experienced and why?
- > Are there opportunities for coordination or partnerships that could make us all successful in progressing toward our goals?