Market Transformation Through Home Energy Rebates

Joan Glickman October 1, 2024





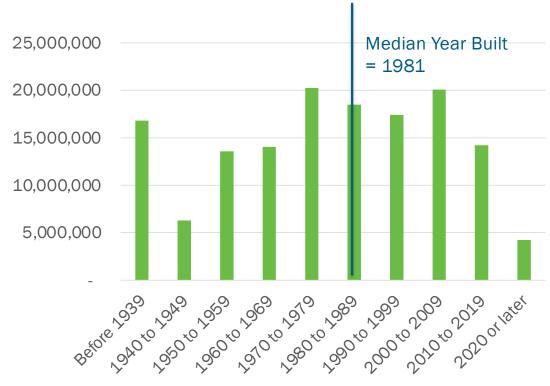
What is Market Transformation?

While there is no single definition, the process of market transformation can be described as carrying out *strategic interventions* to *spur lasting changes* in the structure or function of a market, and/or the behavior of market participants.

Why MT is essential

- Rebates will fund improvements in about 1 million of 127 million occupied homes nationwide.
- 50% of US housing is more than 40 years old
- Significant energy burden on low income
- Extreme temperatures and grid outages pose risks, particularly to elderly and ill residents
- Achieving net zero emissions housing requires rate of retrofits to grow 25X by 2030 – (or as much as 100X depending on estimates)





From American Communities Survey, Census - released Sept 2024

What's needed to scale efficiency in housing?

Widespread demand for residential energy efficiency and electrification upgrades, given...

- Consumer familiarity and perceived value (e.g., savings, resilience, comfort, air quality, return on investment)
- Affordability

Widespread access to efficient equipment and high-quality installation, given...

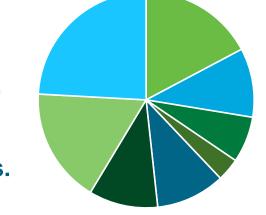
- Contractor interest/sustainable business models
- Supplier participation (distributors, retail)

Widespread access to capital, given...

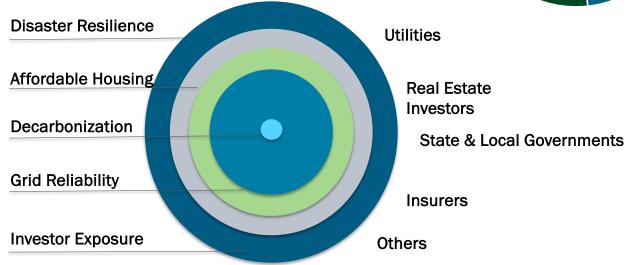
- Value of efficient homes is quantifiable and recognized by market
- Examples:
 - o More resilient homes associated with lower insurance claims during outages
 - Highly efficient homes reduce magnitude of GHG associated with institutional investors such as banks, Fannie
 Mae, Freddie Mac
 - o Efficient and connected homes improve grid reliability

How to Grow and Sustain Investment in Retrofits?

A bigger pie requires greater value relative to cost...



and creating value for different players with different interests.



Rebate program requirements

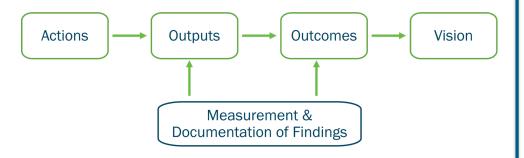
- States must develop and submit their Market Transformation Plans to DOE within one year after initial award of rebate funds under Administrative and Legal Requirements Document, Version 2 (ALRD 2)*
- DOE must review and approve the Market Transformation Plan prior to the state being eligible to receive the third tranche of funds.

^{*}Section 3.3.1 and Section 4.3.1 of the U.S. Department of Energy's (DOE) Program Requirements & Application Instructions (Program Requirements) describe the timing and scope of the Market Transformation Plan for the Home Efficiency Rebates Program (IRA Section 50121) and the Home Electrification and Appliance Rebates Program (IRA Section 50122), respectively.

Developing a Market Transformation Plan

Market transformation plan guidance document for State Energy Offices published September 2024

State plans must describe how actions lead toward a market transformation vision



Vision

What is the state's long-term vision for its housing, particularly in terms of energy performance for residential buildings?

Outcome(s)

Of the many market conditions needed to realize this vision, what specific outcome(s) (objectives or goals) are the state targeting?

Outputs

What deliverables or milestones aimed at realizing the intended outcome(s) (e.g., overcoming a current market barrier) will the state complete?

Actions

What activities will the state undertake to fulfill its planned outputs (deliverables, milestones)?

Measurement & Findings

How will the state track progress toward reaching its milestones; measure impacts on the targeted outcome; and document findings?

Guidance Provides Topics & Sample Plans for Consideration

- Valuing Energy Efficiency in the Real Estate Market*
- Supporting Sustainable Business Models with an Aligned & Qualified Workforce*
- Laying the Foundation for Virtual Power Plants*
- Educating consumers on residential energy efficiency
- Integrating efficiency upgrades in non-energy efficiency focused projects
- Sustaining energy efficiency upgrades to rental housing
- Driving change with state equipment requirements
- Attractive financing for workforce and consumers
- Sustaining investment in multifamily housing energy retrofits*

^{*} Sample plan will be provided for this topic. DOE will also provide technical assistance to states for these areas of focus.

Making the MT plan development & implementation meaningful

- ✓ Focus on how to deliver greater value and/or reduce costs
- ✓ Consider how those beyond the homeowner and the contractor can benefit and/or play a role (e.g., grid operators, renovation firms, insurers)
- ✓ Integrate MT activities in initial program design or in refinements to existing program design
- ✓ Consider potential contributions of other actors to state's plan and actions (e.g., retailers, manufacturers, educational institutions, financing and real estate sectors)

Thank you!

- ✓ Please reach out to me and your project officers with questions or if you'd like help with your market transformation planning.
- ✓ The Rebate Program's Technical Assistance Team will provide additional support for states focused on one of the targeted topics.

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