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Title: Resiliency and Energy Efficiency: The Dynamic Duo to Increase Measure Uptake?

Abstract: In 2018 the United States experienced a total of fourteen natural disasters which cost the nation over a billion dollars each. Tracked by NOAA since 1980, the most recent year was part of a three-year streak with the count of annual disasters more than double the 40-year average. Locally persistent disasters such as wildfires in the Western US or hurricanes in the Southeast create an enduring concern in the mind of the public. Pairing energy efficiency and disaster preparedness leverages disaster concerns to increase customer engagement also capitalizing on synergistic benefits of disaster mitigation and energy efficiency improvements to homes and businesses. We conducted a pilot within an existing Bay Area multifamily energy efficiency (EE) program where energy auditors included a resilience assessment during the energy audit. The customers were provided a report that aligned the resilience recommendations with EE recommendations toward the goal to incentivize more EE measures using the value added by resilience benefits. After the pilot we performed a survey of pilot participants. This presentation, geared toward EE program administrators and implementers, discusses customer responses to the report including:

- customer demographics, disposable income, and energy costs,
- customer attitudes toward energy efficiency,
- customer experience of and attitudes toward local natural disasters,
- specific actions based on the report recommendations, the perceived benefits and the cost of those actions,
- customer perception of the benefits and costs of the recommended measures not enacted,
- other factors related to their decision-making, and
- customer receptiveness to different delivery mechanisms.

Future delivery to residential customers could be optimized using an online customer engagement platform to deliver a combined resilience and energy efficiency message. It would provide disaster risk mitigation and energy efficiency recommendations, highlighting synergistic measures which achieve both goals. Adoption of these measures will not only help us to adapt to the changing climate, it will reduce GHG emissions helping to quell climate change-induced disasters.