

Building Energy Labeling/Rating Impacts

Energy Futures Group

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The Rocky Mountain Institute (RMI) has been supporting building energy labeling policy development with U.S. cities. As part of that work, they compiled and summarized the key impacts from home energy labeling and disclosure initiatives from around the world. Their summary including links to the full studies, with a few updates from some more recent studies, is summarized below. These studies show impacts in terms of sales price premium, time on the market, energy retrofit uptake rates and other benefits.

Green-certified and efficient homes may sell at a 3-6% premium:

- A meta-analysis of 17 studies showed that green-certified homes sold at a price premium of 4.3%, controlling for factors such as size, neighborhood, and amenities.
- A Freddie Mac study in 2019 found that on average, rated homes are sold for 2.7% more than unrated homes, and among rated homes, those with better ratings sold for 3% to 5% more than lesser-rated homes.
- An assessment from the University of Texas showed that in San Antonio, TX, homes listed as green in local MLS databases sold for a 5.9% premium.
- EU countries have required energy labels since 2002: Energy Performance Certificates (EPCs) have been shown to increase the value of labeled homes, from an average of 3.7% percent in the Netherlands to 5.9% in Portugal.
- An assessment of home sales in California from 2007-2012 found a 5% premium for green-labeled single-family homes.

Energy-transparent and green-certified homes may sell faster:

- In a study of Chicago's utility cost disclosure ordinance, homes that reported energy usage sold on average 20 days faster than homes that did not.
- Third-party green certified homes in Portland, OR sold 18 days faster.
- New construction homes with green certifications in Atlanta, GA sold 31 days faster.

Home energy audits and labels may drive significantly higher retrofit rates:

[For reference, the business-as-usual average energy retrofit rate in buildings is estimated to be only 1.0% per year, well below its economically- and technically-viable potential.]

- The Energy Conservation and Audit Disclosure ordinance in Austin, TX, which mandates home energy audits (no score/rating or label) at time of sale, resulted in a 12% retrofit rate in its first year of implementation. Two 2019 studies found that the Austin policy increases price capitalization of energy efficiency and encourages energy-saving residential investments.
- Following home energy labeling (EPC) requirements, EU countries have achieved retrofit rates that range from 17% (Portugal, United Kingdom) to 22% (Netherlands), with 37% (France) at the high-end.

Energy information in listings may increase traffic to energy efficient homes:

- An American Council for an Energy Efficient Economy (ACEEE) study from August 2020 shows that efficiency information can influence both simulated home purchase decision-making and willingness to pay for efficiency.

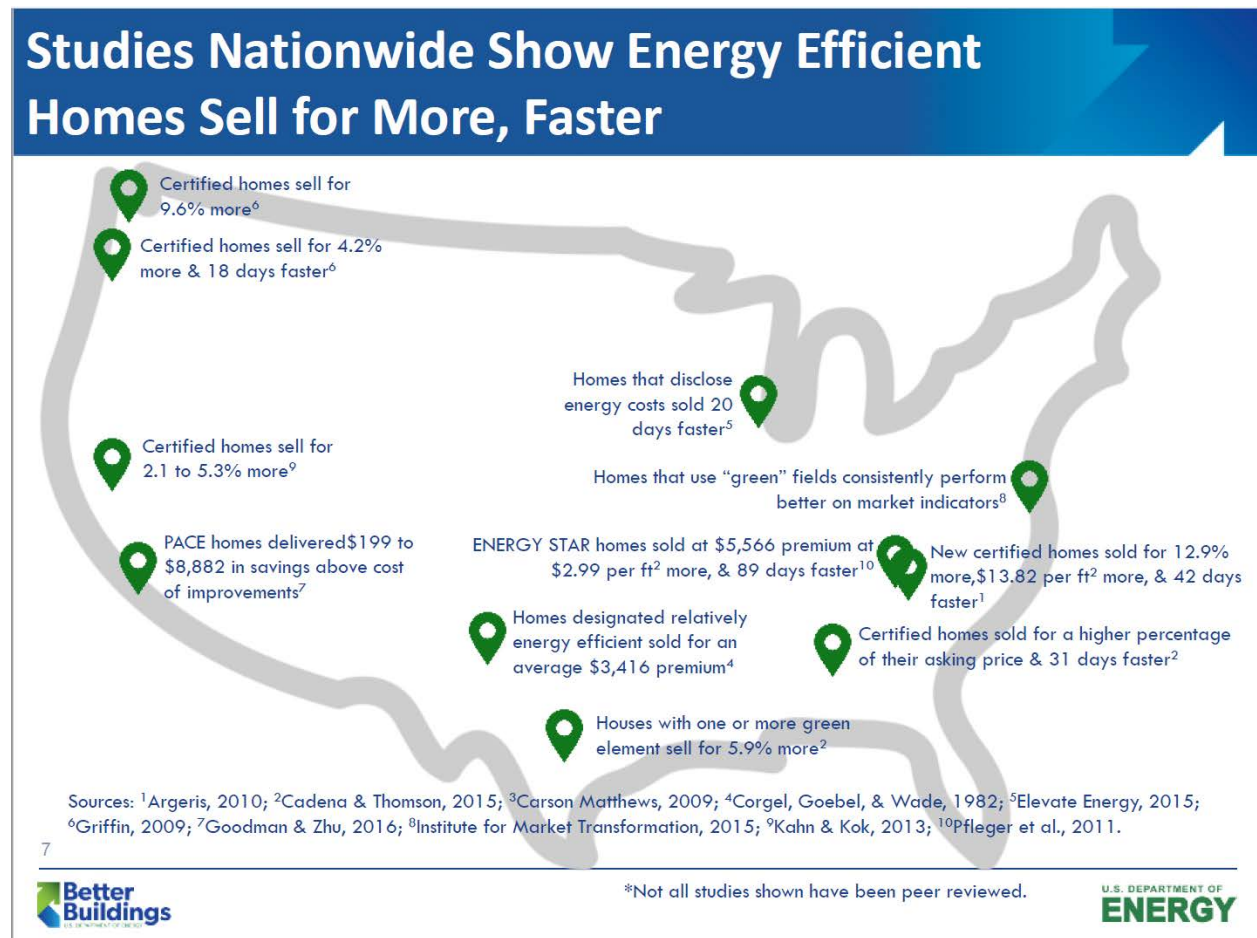
Mortgage delinquency rates may be lower for energy efficient homes:

- According to a [2019 Freddie Mac study](#), homeowners with higher debt-to-income (DTI) ratios—45 percent and above—who have energy-rated homes kept up with monthly mortgage payments better than owners of unrated homes. The 60-day delinquency rate on conventional mortgages was about 2 percent lower for those with energy efficiency-rated homes than those with unrated homes.

Other potential benefits:

- Energy burdens, the percentage of income spent on energy bills, can be [three times higher for low-income households](#); home energy labels bring to light the necessary information to help low-income families identify, compare, and mitigate these burdens.
- In a [National Association of Realtors \(NAR\) 2019 survey](#), 69% of brokers said that energy efficiency promotion in listings is valuable, 59% said consumers are interested in sustainability, and yet 62% are uncomfortable or unsure answering clients' questions about home performance.

The U.S. Department of Energy has also summarized energy labeling and disclosure impacts based on studies in the following map.



States and cities across the U.S. are implementing voluntary and mandatory policies and programs to make energy performance visible through energy labeling initiatives. The National Association of State Energy Officials (NASEO) has compiled a map of U.S. policies, included below.

Residential Energy Disclosure Policies in States and Cities

