

How Certification Drives Market Change

Pearl Certification

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Introduction

Within the dry legal language of the statute that created the Inflation Reduction Act's (IRA) HOMES rebate program is a provision requiring that homeowners who receive a rebate must also receive a certification that details the improvements made to the home. This may seem like an obscure requirement, but it can have profound implications on states' abilities to administer effective programs.

There are two impacts worth considering.¹ The first is that the certification has the potential to create value for the homeowner, in the form of increased equity when the home is sold. Without documentation of this sort, an efficient home does not stand out in the market. With a certification, the efficient features of the home are visible, enabling the seller to capture some of their investment in energy upgrades. The second reason is that certifications can drive market transformation, so that over time rebates are no longer necessary. Because certifications create value in the home, they create a new incentive for homeowners to make improvements – an incentive potentially much larger and longer lasting than a rebate program.²

There are two goals to the certification provision in the HOMES rebate program:

- To ensure that homeowners capture the home's potential equity value that the rebates create, and
- To drive a change in market dynamics that will create a robust demand for energy efficient homes and home features when the rebate funds run out.

To understand how the provision works, it's helpful to look at the details of the language (U.S. Congress, 2022):

(4) for quality monitoring to ensure that each home energy efficiency retrofit for which a rebate is provided is documented in a certificate that—

(A) is provided by the contractor and certified by a third party to the homeowner; and

(B) details the work performed, the equipment and materials installed, and the projected energy savings or energy generation to support accurate valuation of the retrofit;

The key term here is “accurate valuation of the retrofit.” The accurate valuation of the retrofit is crucial for both homeowners and the market as a whole. For homeowners, an accurate valuation allows them to recognize the true worth of their investment in energy efficiency improvements. This not only provides a sense of satisfaction with their decision to make the upgrades, but also serves as a tangible

¹ As the authors of white paper can't definitively say what was in the mind of the authors of the legislation, the assumptions about intent are derived from comments and recommendations made to, and conversations with, legislative staff at the time the Inflation Reduction Act was drafted.

² Note that increase in value is likely to be related to energy savings. This means that even if a buyer pays more for a home, their total cost of ownership, including mortgage and energy, should not be higher than if they paid less for a non-efficient home.

incentive for future homeowners to invest in similar improvements. Additionally, accurate valuations can play a significant role in influencing the decisions of potential buyers, as they will be more inclined to invest in a home that has documented energy efficiency improvements, which can lead to long-term savings and a reduced environmental impact.

In terms of market dynamics, the certification provision has the potential to create a ripple effect that extends beyond individual homeowners. As more homes receive certifications for their energy-efficient upgrades, the demand for such improvements is likely to increase. This, in turn, can lead to a more competitive market for energy-efficient homes and home features, ultimately driving innovation and the development of new technologies in the sector. Furthermore, as certifications become a standard practice, they may also contribute to an overall shift in societal values towards energy efficiency and environmental consciousness. This shift could result in the creation of new policies and regulations that further support and encourage the adoption of energy-efficient technologies, thereby creating a self-sustaining cycle of improvement and innovation in the industry.

Why Aren't Efficient Homes More Valuable?

If you ask an energy efficiency expert whether energy efficient homes should be more valuable than comparable non-efficient homes, they almost invariably say they should be. Efficient features reduce the home's energy bills, which by itself creates value for the homeowner. Efficient features also provide a wide range of collateral benefits: they make the home more comfortable and quieter, improve occupant health, cut maintenance costs, and reduce problems like mold build-up and pest infestation. And yet, if you talk to almost anyone who has made their home more efficient and sold it, or to the average real estate agent, they will tell you that, no, efficient homes don't sell for more.

Consumer sentiment suggests efficient homes should come with a higher price tag. Studies, both national and regional, carried out by a range of reputable firms, from Consumer Reports to the National Association of Realtors (NAR, 2023) to the National Home Builders Association (NAHB, 2021), consistently show that homeowners value efficient homes and efficient home features. Many respondents say that they would pay more for efficient homes. So why are real estate agents and sellers so convinced that efficient homes don't sell for more? There are four related reasons.

First, the efficient features in a home are often invisible. That's obvious in the case of wall insulation and air sealing. But even though buyers can see heating and cooling systems and water heaters, they are unlikely to differentiate high-efficiency systems from regular ones. In other words, buyers often don't value efficient homes because they have no idea the home is efficient. For value to be captured, these features have to be visible to potential buyers.

Second, even if information about a home's efficiency is provided at time of sale, not all information is equally effective at reaching the buyer. The best information speaks to buyers in language they understand and engages them emotionally as well as intellectually. To be effective, it should also be presented in an appealing way that engages with them, so that they can understand and make a connection with the benefits that efficiency provides.

Third, the real estate agent needs a reason to use the certification in the sale. The agent plays a crucial role, and their involvement in promoting the efficient features of a home can significantly impact the perceived value. What the agent really needs is materials that can be used for marketing purposes. These materials should highlight the benefits of energy efficiency in a clear and compelling way, emphasizing the long-term savings and increased comfort that come with an efficient home. By providing real estate agents with the necessary tools and information, they can better communicate the value of energy-efficient homes to potential buyers, ultimately helping to increase the perceived value and marketability of these homes.

Finally, even when information about a home's energy efficient features is made available in a form that is accessible and engaging, the real estate agent showcases these features in the transaction, and the buyer responds and makes an offer that takes the benefits from these features into account, there is one final hurdle. The appraiser and mortgage underwriter may not agree with the buyer that the home is more valuable than a comparable, non-efficient model. Real estate agents are very sensitive to the risk that efficient features won't "appraise out." Appraisers in turn point to mortgage underwriters' unwillingness to recognize the value the appraiser attributes to efficient features.

In other words, for an energy efficient home to be properly valued, four conditions must be met:

- The home's energy efficient features must be made visible to buyers;
- The information about these features must be accessible and engaging;
- The real estate agent must showcase these features during the listing and sale process;
- The information about these features must support a higher appraised value that is accepted by the mortgage lender.

Meeting these conditions establishes the conditions for market transformation. Briefly, when efficient homes are properly valued in a market, the conditions for market transformation have been established. In brief, when energy efficient routinely sell for a price premiums in a market, and buyers recognize that this premium exists,

The remainder of this paper provides more detail on *how* certifications address the issues listed above, and *why*, as a result, they support important public policy goals.

Valuing Efficient Homes

Making Value Visible and Engaging

A home certification is a crucial instrument for guaranteeing that homeowners, potential buyers, and other stakeholders have access to essential information about a property's energy efficiency and sustainable features. By making the invisible energy efficiency visible, the certification empowers individuals to make informed decisions when upgrading or purchasing a home. The certification provides information about two different aspects of the home:

- The home's energy consumption, both absolute (e.g. in MMBtu) and relative to other homes (e.g. a Home Energy Score or HERS rating);
- The home's energy efficient features, including envelope, HVAC, baseload, and other asset features.

More than a decade ago Chicago-based non-profit Elevate began promoting the hashtag “making value visible.” At that point, many energy efficiency professionals assumed that this information should be provided in technical terms: R-value for insulation, HSPF and SEER for heat pumps, and air changes per hour for air sealing for example. As a result, the industry focused on creating data standards, such as BPI-2101, and working with the real estate industry to ensure compatibility with their data standards.

As it turns out, these assumptions fell short of the mark. Homeowners and home buyers find this information is useful, but it's not what interests or engages them most. Buyers don't know about R-values, and often don't have time to learn. When making a purchase decision, they focus in large part on what their lived experience will be like in the home: using the kitchen or sitting on a deck, for example. The aspects of an efficient home that engage them most are connected to lived experience, including:

- How comfortable is the home?
- Will my family be healthy living here?
- How easy will the home be to maintain?
- (And of course) How much will I pay in energy costs?

A certification is most effective if it helps to answer these questions. In practice, this means providing information about the home's features, but also *translating these features into the language of benefits*. In other words, the owner or buyer needs the connection between insulation and air sealing and the health, comfort, and energy savings benefits it provides.

These characteristics of an efficient home roll up into the idea of quality. Survey research indicates that buyers strongly value quality: within their price range, they want the “best” product. A

home certification makes quality tangible by providing assurance that the home's performance will be exceptional.

Certification can significantly contribute to the pride of ownership. This tangible recognition of their home's quality and performance not only increases the property's value but can foster a sense of pride as it demonstrates the homeowner's forward-thinking approach to property ownership. As more potential buyers become aware of the benefits associated with certified homes, the demand for such properties is likely to increase. Consequently, homeowners with certified properties can take pride in knowing that their choice to invest in a high-performing home not only benefits themselves but also contributes to the experience future owners will have in that home.

The form that this information is provided in also matters. A densely printed, black-and-white piece of paper filled with technical jargon is unlikely to interest or engage as many buyers as a full-color document with photos that speaks to the buyer in language that addresses their interests and concerns, and is available in both printed and online format. In short, providing homeowners and home buyers with information is crucial, but the information will not be effective in driving behavior unless it is provided in ways that engage them and addresses the issues that truly interest them.

Set Real Estate Agents Up For Success

Even if a certification makes the efficient features of a home visible to buyers in a way that engages them, it's still very possible that this documentation will have no impact on the sale. The seller's real estate agent plays a key role in ensuring that the certification has an impact on the sale. The agent markets the home: creating the MLS listing, staging the home, organizing showings, and highlighting the home in social media. For potential buyers to understand that the home is efficient, the agent needs to ensure that the certification is present in each of these media. For example, the home certification should be featured in the MLS listing (ideally as a photograph as well as in the comments), and it should be visible at showings, and referenced in social media posts.

If the agent fails to deploy the certification in the marketing, the efficient features will *still effectively* be invisible, no matter how well it is designed. Energy experts sometimes assume that an agent will naturally want to feature a home's efficient features. In principle, agents do want to showcase all the best features of the home. In practice, however, they may be cautious about talking up energy efficiency. Agents are strongly motivated not to add complexity to a transaction and do anything that might delay or prevent a closing. Their business rests in part on assuming the role of an expert and problem solver.

For an agent to want to use an energy certification in marketing the home, it should be:

- Attractive and appealing to buyers (so it reflects well on the agent);
- Designed in a way that does not require the agent to explain it in detail (so that the agent does not run the risk of looking uneducated);
- Easy to incorporate into the marketing process.

And, of course, it should showcase the ways that make the home interesting to buyers and support a higher valuation.

Innovative, forward-thinking agents will recognize the value of a home certification that meets these criteria and find ways to incorporate it into their sales process. More conventional agents may be slower to embrace home certifications. The factors that will drive their engagement over time will be visibility. If agents see certified homes appearing regularly on the MLS, they will be more likely to want to offer it themselves. This is particularly true if the home certification generates enough visibility in the market that homeowners start asking for certified homes. A paper by Elevate estimated that once 10% of homes in a market are certified, the majority of agents will pay attention.

The IRA rebate programs provide a unique opportunity to achieve this type of scale because of the sheer number of homes that will be improved. The opportunity is potentially larger, and scale reaching that much more rapidly, if improvements made through the HEEHR program and/or the 25C tax credit program, are also made visible at time of sale with a certification.

Solving the Appraisal and Underwriting Problems

The appraisal and underwriting process are the last barriers to an energy efficient home being properly valued. A buyer may offer a higher price for a certified efficient home, only to see the home not “appraise out” if the appraiser doesn’t recognize the value of the efficient features. Further, the underwriter may assign value to the efficient features, but the underwriter may not agree. These problems have been particularly serious over the past few years for owners of efficient and high-performing homes who have wanted to refinance their properties.³

The solution to these problems is information. For appraisers and underwriters the information doesn’t even need to be engaging or interesting: it just needs to be clear, convincing, and accurate. The most widely accepted vehicle for communicating information to appraisers is currently the Appraisal Institute’s Green and Energy Efficient Addendum, which provides a uniform way to communicate

³ A major solar mortgage lender told Pearl that 40% of the appraisals of solar homes that they receive do not attribute any value to owned solar panels. The issue is even more acute for homes with efficient features that are even harder to see and value.

information about the home's certifications, energy consumption, and efficient and renewable features to appraisers. A new version of the Uniform Residential Appraisal form (Form 1004), enabling the appraiser to collect much more information about the home's efficient features and communicate it to the buyer, will be in use in 2025.

An effective certification should provide the information about the home's efficient features in a way that enables the appraiser to easily fill out the Appraisal Institute addendum, or auto-populates the Addendum so it can be provided to the appraiser. To maximize the chances that the appraiser and underwriter will recognize the value of efficient features, information about the energy savings of the home and features, as compared to an average home of the same type, should be provided as part of this information whenever possible.

A practical problem that appraisers face when they are assigned an efficient home concerns comparable sales. The appraiser should be able to assess market reaction to efficient homes and home features, and to find other comparable homes, including efficient homes. The fact that efficient homes are typically invisible at time of sale makes this difficult in most markets. Again, IRA rebate programs provide an opportunity to change this dynamic by creating a large pool of certified homes that will enable appraisers to assess market acceptance and find comparable sales much more easily. This data will go a long way to addressing not only appraiser but also underwriter concerns.

Value Cycle

Certifications play a significant role in supporting the home value cycle by providing a tangible and standardized way to showcase a home's energy efficiency and sustainable features. When a home is certified, potential buyers can easily identify and understand the value of these features, which in turn may lead to a higher demand for energy-efficient homes. As more homes receive certifications and enter the market, the increased availability of comparable sales data further helps appraisers and underwriters to recognize and assign appropriate value to energy-efficient features. This creates a positive feedback loop, where the growing demand for certified homes encourages more homeowners to invest in energy efficiency improvements, ultimately driving innovation and market transformation in the industry.

Moreover, certifications contribute to a shift in societal values towards energy efficiency and environmental consciousness. As more people become aware of the benefits associated with certified homes, the demand for such properties is likely to increase, leading to the creation of new policies and regulations that further support and encourage the adoption of energy-efficient technologies. This shift in values, combined with the increased visibility and accessibility of information about energy-efficient homes, creates a self-sustaining cycle of improvement and innovation in the industry, ultimately benefiting homeowners, buyers, and the environment. Pearl expands on this concept in a white paper

titled, *Building to Last: [Painless, Inexpensive Market Transformation and the Inflation Reduction Act Residential Rebate Programs](#)*.

In conclusion, the Inflation Reduction Act's HOMES rebate program and its certification provision have the potential to create significant value for homeowners and drive market transformation towards energy efficiency. By making the invisible visible and engaging potential buyers with accessible information, certifications help homeowners capture the true value of their investments in energy-efficient improvements. Furthermore, certifications support the home value cycle by increasing demand for high-performing homes, driving innovation in the sector, and fostering a shift in societal values towards environmental consciousness. As the number of certified homes continues to grow, the industry will likely experience a self-sustaining cycle of improvement and innovation, ultimately leading to a more sustainable and energy-efficient future for all.

Resources

National Association of Realtors. (2023). Home buyer and seller generational trends.

<https://cdn.nar.realtor/sites/default/files/documents/2023-realtors-and-sustainability-residential-05-03-2023.pdf>

National Home Builders Association. (2021). What home buyers really want.

<https://www.nahb.org/-/media/NAHB/news-and-economics/docs/housing-economics-plus/special-studies/2021/special-study-what-home-buyers-really-want-march-2021.pdf>

U.S. Congress. (2022). H.R.5376 - Inflation Reduction Act of 2022, 117th Congress (2021-2022). Retrieved from

<https://www.congress.gov/bill/117th-congress/house-bill/5376/text>