

PREPARED BY **EARTH ADVANTAGE INSTITUTE** WITH THE SUPPORT OF

Bullitt Foundation





Acknowledgements

Earth Advantage would like to thank the entire Regional Rating and Disclosure project team for their contributions and support. In particular, we thank Neelima Shah (Bullitt Foundation), David Cohan and Neil Grigsby (Northwest Energy Efficiency Alliance), William Ranes and Angela Santamaria (Washington State University Energy Program), and Jana Gastellum (Oregon Environmental Council).

Use of the Assessment

This document is available to the general public without fee or other access control. Anyone may read this assessment or use it for their own personal, policy, or academic purposes. No commercial use is permitted unless specific permission is granted in writing in advance. Any errors contained within this assessment are solely those of the authors and not of the Regional Rating and Disclosure project team.

About Earth Advantage

Earth Advantage's mission is to accelerate the creation of better buildings. We use an innovation model that transforms our real-world experience into products and services that advance building performance. Earth Advantage certifies, researches, educates, and incubates to help realize a building industry that harmonizes with the natural environment.

Learn more at earthadvantage.org

Introduction

64%

of survey respondents thought an energy scorecard would be useful.*

As local and state governments craft policy approaches to reducing carbon emissions in the built environment, one particular approach that has yielded interest in both the commercial and residential spheres is energy rating and disclosure. While commercial policies being implemented in an increasing number of U.S. cities have generally utilized one methodology and focused on mandatory requirements for building owners, residential systems are a medley of pilot programs utilizing multiple methodologies, terminologies, and voluntary disclosure.

^{*} The Cadmus Group. National Association of State Energy Officials Multi-State Residential Retrofit Program Baseline Survey Results – for state of Washington, 2012

The regional residential market – both consumers and industry stakeholders – could benefit from a system that provides greater consistency and clarity. Led by Earth Advantage Institute and supported by the Bullitt Foundation, Northwest Energy Efficiency Alliance, Washington State University Energy Program, and Oregon Environmental Council, this project seeks to create an agreed upon "playbook" for voluntary regional energy rating and disclosure that provides this needed clarity and consistency.

By collaborating with key industry segments, we seek to establish agreed upon "rules of the road" that take into account the needs and constraints of the market. The project plans to improve the efficacy of a voluntary regional framework through the lens of key industries, including, but not limited to: real estate, new home construction, remodeling contracting, and home performance contracting and energy auditing.

An Energy Rating and Disclosure Policy Framework for the Pacific Northwest

Despite early adoption of and positive experiences with nutrition and vehicle miles-per-gallon labeling protocols, the U.S. has lagged behind significantly in structuring, defining, and implementing the necessary support mechanisms for a successful program for residential energy performance.

In those Pacific Northwest locations where voluntary residential energy rating is available, programs for new and existing homes are sometimes being tested or implemented using differing standards, rules, methodologies, and terminologies. A more understandable and consistent energy rating and disclosure protocol will support both consumers and key industry stakeholders. This project considers the unique market characteristics of the Pacific Northwest, including among many other things, real estate trends, consumer preferences, and the insight of the area's industry representatives. To gain a better understanding of how programs have been implemented around the region and around the country, a review of energy scoring pilot programs and of existing energy disclosure policies – notably Austin, Texas's Energy Conservation Audit and Disclosure (ECAD) ordinance – has provided insight into potential opportunities and drawbacks of different approaches.

Some Useful Definitions

Residential energy rating and disclosure policies are a relatively new strategy for reducing energy consumption – at least in the United States. Consequently, the language used to describe various strategies and components of such policies has not been firmly established. The definitions below lay the groundwork for a common understanding of the concepts contained within this document.

Energy scoring and energy labeling is used interchangeably with energy rating.

Energy rating (or energy score) is a way of quantifying the energy efficiency of a home or building. Internationally, energy rating strategies vary widely. A numeric score using the absolute energy use of a home can be defined in mmBtu's (millions of British thermal units) or kWhe (kilowatt-hour equivalence). Alternatively, some energy ratings are created on a scale of 0 to 100 or 1 to 10. These are also sometimes referred to as an index. A non-numeric, multi-tiered rating is another possibility, such as an A to F rating.

Energy rating and disclosure refers to the strategy that utilities and state and local governments are implementing to encourage an emphasis on energy efficiency and allow for the financial valuation of energy efficiency in the building sector – both residential and commercial. These programs and policies vary widely in their specifics.

An energy audit is the process of either visually inspecting a home, or conducting tests, such as a blower door test, that evaluate and quantify how a home uses energy. Energy audits are also more frequently being referred to as energy assessments.

A homeowner chooses to have a home energy assessment conducted by an energy auditor and verified by a third party. In some cases, the results of the assessment are then conveyed through an energy rating, or energy score, applied to the home, which is uniform across homes and so can be used to compare energy efficiency across multiple homes. An energy audit report (or energy assessment report) that provides detailed information about the home's energy efficiency is also often – but not always - provided along with the energy rating. In some cases – for example, with the ECAD program in Austin, Texas – only an energy audit report is provided to a homeowner.

The energy audit report can be used by the homeowner to determine specific improvement opportunities. Both the energy audit report and the energy rating can be disclosed to subsequent buyers of the home.

A second *energy rating* can be obtained if a homeowner has made any energy improvements. This second energy rating – sometimes called the *improvement score* or *post-retrofit score* – can be used to validate the improved energy performance of the home and verify this improved performance.

Home performance refers to how well a home operates, or performs, in terms of its efficient use of energy, air quality, and provision of comfort. A home that uses less energy, while maintaining good thermal comfort and good indoor air quality for the inhabitants is higher performing than a home that wastes a lot of energy and/or is uncomfortable and has poor air quality.

Home performance contractors carry out projects in a home that improve its energy performance, air quality, and comfort. These may include duct sealing, replacement of thin or leaky windows, addition of insulation, installation of solar panels, and a host of other energy efficiency related projects. They often also conduct *energy audits* or assessments prior to recommending and carrying out these projects for their clients.

Home Building Industry



In an effort to gain an edge, builders often tell their customers that their homes are better – better because they are more energy efficient, have fewer temperature fluctuations, lower utility bills, or whatever their particular marketing message is. But how does the customer go about separating fact from fiction in an industry where there are so many messages, and a throng of standards, labels, and certifications that confuse even the savviest buyers? A simple, regionally consistent voluntary energy scoring protocol – like a home energy "miles per gallon" rating – is one solution that is gaining traction with builders and homebuyers alike.

Energy Rating and the Pursuit of Consumer Confidence

"[An energy rating or performance score] is a strong indication

Jim Chapman, CEO of Legend Homes, agrees. "We see energy scoring and the performance testing that is done as part of that process as one big net that serves as a validation of the quality of our homes and the value we're providing," says Chapman. While buyers now often struggle to understand the relevance of energy scoring, "as it becomes more widespread (energy) scores will be more important to buyers in comparing homes."

Research suggests that consumers are beginning to see an energy rating or performance score as more than merely a symbol of quality. Consumers are more likely to view the information conveyed by an energy score as an important tool in helping them make smarter purchasing decisions. According to a 2012 survey of Washington residents, nearly 64% of respondents thought an energy scorecard that explained a home's current energy use would be useful to them1.

Many in the building industry are noticing this shift amongst consumers as well. According to Legend Homes' Chapman, the average homebuyer's mentality has changed in the last few years. In previous boom times, buyers only really considered the sales price because the transaction was often seen as merely a short-term, perhaps speculative, investment. Now buyers are beginning to think about the purchase "with a long-term perspective and factors like energy become more important." Legend uses an energy bill guarantee² and an energy score hand in hand as a sales tool to meet buyers' interest in longer-term issues like operational costs and quality construction practices.

Builders and sellers of homes often encounter homebuyers who just don't know how to ask the question about a home's energy performance or if they do, don't know whether they're getting the right answer. An energy rating program can help close the loop by providing the consumer with the information they need to ask the right questions and the product validation they need to know they're getting the right answers. Consumers will benefit from an energy rating and

for buyers of quality", says Dustin Knapp of River Lane Homes, a Medford, Oregon-based builder. "They may not know exactly what it means, or how it was determined, but they feel like they're getting a good product. It's good for consumer confidence."

"...as it becomes more widespread (energy) scores will be more important to buyers in comparing homes."

> - Jim Chapman, CEO of Legend Homes

"Nine out of ten buyers would rather buy a home with energy efficiency features and permanently lower utility bills than one without those features that cost 2%-3% less."

> -National Association of Home Builders 2012 "What Home Buyers Really Want" report

The Cadmus Group. National Association of State Energy Officials Multi-State Residential Retrofit Program Baseline Survey Results - Washington, 2012.

² Legend Homes guarantees the original purchaser that the energy costs (Gas & Electricity costs) will not exceed an average of \$99 per month for any one year period during the first 3 years of homeownership.

disclosure program that creates more transparency in the market. By the same token, the home building industry is beginning to see the advantages of a regionally consistent energy rating system that can easily address consumer confusion and emphasize the inherent benefits of their products.

2,700

Energy Performance Scores for new homes in Oregon

"We need a uniform standard. It's complicated enough, why add more complication?"

— Jon Girod, President of Quail Homes

The Need for More Consistency, Less Confusion

For builders like Knapp, John Girod of Quail Homes and many others in the region, creating consistent energy rating and disclosure standards would simplify but not significantly alter their current business operations. For instance, there are more than 200 Oregon builders participating in Energy Trust of Oregon's New Homes program.³ These builders already receive third party verified energy assessments of their homes to obtain an energy performance score and disclose this information to potential buyers. And there are many other programs across the region that certify a home's energy efficiency, or go a step further to generate a performance score, or energy rating. Builders involved with these programs are already in the business of energy rating and disclosure. In fact, many of them say that a regional energy rating and disclosure policy wouldn't impact their business practices.

There are, however, improvements needed to create a successful system that better supports builders and the rest of the marketplace. One of the biggest problems builders and homebuyers face is one of consistency, which can be addressed by a more standardized and simplified approach to energy scoring. Says Girod of Quail Homes, "Energy labeling is confusing right now. The end consumer is bombarded with all different types of programs... Consumers get confused." Having a consistent set of rules and guidelines for the region would benefit the building industry, especially for those who build across multiple jurisdictions. As Girod points out, "when I build in Clark County, Washington they won't let me use the EPS4. We use HERS5. We need to get a uniform standard. It's complicated enough, why add more complication?"

A region speaking with one voice about energy rating and disclosure will also lead to a more informed and less confused public, which makes the builder's sales job easier. As consumers hear more about energy scores, they will need less of an explanation from builders.

³ Pertains to builders based in Energy Trust of Oregon (ETO) market area, which includes areas serviced by Portland General Electric, Pacific Power, NW Natural & Cascade Natural Gas. Energy Trust of Oregon market share in Portland is approximately 84 percent of the state's population.

⁴ Energy Performance Score

⁵ Home Energy Rating System

"[Energy scoring] helps us build a better product"

> – Dustin Knapp, River Lane Homes

So What's the Bottom Line for Builders?

Most Pacific Northwest builders agree that a regional energy rating and disclosure system would be a good thing for business if it is clearly defined and uniformly applied. Many builders see energy rating as a tool to help them gain exposure and differentiate their product. Legend's Chapman uses energy scoring as one method of validating his company's construction practices, with project managers sometimes competing with one another to build homes with a better score. And as Knapp of River Lane Homes plainly puts it, "[energy scoring] helps us build a better product."

A well-designed regional energy scoring protocol that creates an industry standard and improves market transparency could be a powerful marketing tool for homebuilders. Consider that current building codes have evolved to produce a more energy efficient home, so that even baseline new construction has superior energy efficiency to a majority of existing homes. When energy performance is made transparent through disclosure, consumers will have the opportunity to compare various new homes and those on the existing homes market. This provides an opportunity for builders to clearly validate the energy benefits of their homes. And for those building beyond code, energy ratings can validate their brand as a "high performance" homebuilder.

Home Performance Contracting Industry



Now is a good time to be a home performance contractor. Many HVAC, remodeling, and insulation companies have added home performance divisions, and they are seeing increasing demand for these services. Maybe it's a market response to threats of global climate change. Perhaps it's growing consumer concern about the health impacts of poor indoor air quality. Or maybe it's that more utility providers are beginning to take a "whole house" approach with their energy efficiency programs. Whatever the reason, consumers are slowly but surely becoming more aware of the benefits of improving the energy performance of their homes.

"Competition will be a good thing for the market, but it will have negative effects if the quality control mechanisms are not in place to ensure a consistent level of service."

> — Charlie Rogers, Habitat Home Energy Specialist

8,200

Energy scores for existing homes in Oregon and Washington

In the new homes market, many homebuilders are disclosing their homes' energy performance to prospective buyers as a way to differentiate their products and prove the quality of the construction. This market activity has also transferred to a growing interest in energy scoring and disclosure for existing homes. Numerous locally based energy rating and disclosure pilot projects are scattered throughout the Pacific Northwest¹, generating nearly 11,000 residential energy scores². The marketplace is becoming more familiar with the concept of energy scores, and industry players are more frequently using energy ratings of one kind or another as a tool for quantitatively demonstrating the benefits of their work to homeowners.

As energy scoring programs continue to spread regionally, there is a concern that different standards, procedures, and ratings will confuse and frustrate not only consumers but industry professionals as well. The home performance contracting industry has an important role to play in helping to establish consistent guidelines across jurisdictions and territories. For residential energy scoring to have staying power it must support the home performance contracting industry. Therefore, successful energy rating programs must be designed to take into account the needs and realities of how home performance contractors do their work. A set of regionally accepted ground rules will assist in this effort.

Risks and Benefits of Energy Rating and Disclosure: Lessons from Austin, Texas

When it comes to energy rating and disclosure, how exactly are home performance contractors being impacted? The experiences of other regions where programs have been implemented can offer guidance about what has worked and where to exercise caution. The city of Austin's Energy Conservation Audit and Disclosure (ECAD) program, which requires time of sale energy assessments for homes ten years or older, has resulted in an increase in energy assessment work and a better-informed local consumer market. In its first year, the program generated nearly 5,000 energy assessments from a total of 9,549 homes sales in the Austin area³.

Jeremy Dickens, owner of Austin's Green Team, a full-service HVAC and

¹ Piloted voluntary energy scoring programs exist in: Energy Trust of Oregon territory, Kitsap County, WA, Thurston County, WA, Snohomish County, WA, Bellingham, WA, Spokane, WA, and Seattle, WA

² At time of writing, 2,700 Energy Performance Scores (EPS) have been generated for new homes and 7,984 EPS have been generated for existing homes in OR and WA. The Department of Energy Home Energy Score (HES) has been provided for 183 homes in Oregon. RESNET's Home Energy Rating System (HERS) index has been generated for 85 homes in Washington.

³ Austin Energy and City of Austin. Austin's Early Experience with Time-of-Sale Ratings. [Webinar]. December 15, 2010.



Workforce Impacts of City of Austin's Policy

Number of companies providing energy assessments

Before ECAD:

20-30

After ECAD:

250

mechanical contractor, says his business has improved since ECAD was implemented. Dickens points out that most of his current clients are not home sellers looking to improve their energy assessment results prior to listing or hoping to negotiate a higher sales price in exchange for a more efficient home. More often, his business comes from either long-term homeowners who see the city's home performance rebate program as an incentive or from recent homebuyers who have been in their homes for six months to a year. For this latter group of customers, the information from the previous homeowner's energy assessment disclosed during the transaction has exposed them to the benefits of upgrading their recently purchased home.

"After one summer, their energy bills are high and they aren't comfortable," says Dickens, so they contact him to see what can be done. Dickens believes that in any case, he can attribute much of his customer base to an increased awareness about home performance issues brought about largely by Austin's energy disclosure program, and especially as a result of the program's strong education component. So even if ECAD did not induce the seller to have the energy upgrades done beforehand, "[the program] has helped residents become better informed about home performance issues", says Dickens. The results are that Dickens' business – and other home performance contracting companies like his – are benefitting.

Managing the Risks of Increased Demand

Of course increased market demand in home performance, while it has created benefits for many, has presented challenges for some. The experiences of home performance contractors in Austin, for example, suggest that certain types of policies can quickly boost business but, if not well-conceived and tested, can also come with some unintended consequences. Tim Kisner, the City of Austin's ECAD program manager, believes that on the one hand, the program has been very effective in terms of job creation. He points out that the number of companies providing energy assessment services went from 20 to 30 prior to the implementation of the policy to a high of 250. The city of Austin offered rebates on the costs of start up equipment and training for new companies that met certain standards and agreed to work with ECAD's home performance program. The goal was to ensure that there were enough companies to meet the demand the mandatory policy was predicted to generate.

On the other hand, as Charlie Rogers of Seattle's Habitat Home Energy Specialist points out, a dramatic increase in the number of energy assessment or home performance contracting companies in any market isn't necessarily a good thing. Depending on how it is structured, an energy labeling and disclosure program could bring in more work, but it also has the potential



Successful energy rating programs must support the home performance contracting industry

There are 600,000

single-family homes
that still need energy

providing a condition of the providing a

- NW Energy Coalition

upgrades in Oregon

to create more competition for those doing energy audits. Says Rogers, "Competition will be a good thing for the market, but it will have negative effects if the quality control mechanisms are not in place to ensure a consistent level of service. Currently there is already a wide range of quality within the existing pool of energy auditors. Newcomers to the industry could likely be more focused on making money and a higher volume of sales than providing a quality level of service. This could have the effect of watering down the quality of work, giving the industry a bad reputation and leaving it difficult for the existing auditor pool to differentiate themselves."

While lower prices for homeowners are certainly not a bad thing, addressing the potential for 'a race to the bottom' on pricing is important for the success of any new initiative. Regardless of policy structure, a new program must be designed to avoid the pitfalls that can accompany rapid, unchecked market expansion. A steady, gradual growth in workforce demand will behoove both the home performance industry and their consumers. Greg Hecker, Austin home performance contractor and owner of Attic Care Ltd. would vouch for that. He watched as prices for a basic energy assessment dropped from \$250 to around \$150 in Austin when the ECAD policy was implemented. At the same time, he says he was troubled by the quality of the new entrants into the industry, many of whom only seemed interested in making a quick buck. Ultimately, crafting a program with strong emphasis on quality assurance standards will result in both reasonable pricing and high quality of work.

The reality is that home performance contractors should not base their entire business on the implementation of an energy rating and disclosure program. In the case of Austin's disclosure policy, a majority of the new

market entrants quickly found that the work generated wasn't enough on its own to sustain a business. Ultimately, many of those who entered the market at the rollout of Austin's policy have since gotten out, leaving behind the more experienced and higher quality performance contractors.

Closing the Consumer Information Gap

One thing home performance contractors in the Pacific Northwest and in Austin agree on is that a more educated public is better for business. And research is finding there is significant interest amongst consumers for accessible, transparent energy performance information. A 2012 survey of Washington residents shows that 64% of respondents thought a numeric scorecard that explained a home's current energy use would be useful⁴.

The access to transparent energy information generated by energy rating and disclosure programs produces a better-informed consumer who is more likely to seek out the services of a home performance contractor. Of course, just as having miles-per-gallon (mpg) ratings on cars does not always result in a consumer purchasing the more fuel-efficient model, a homeowner will not always be compelled to invest in energy upgrades because of a home's energy score. However, as with the mpg rating, consumers are more equipped to make choices that favor efficiency because with a clear score they are better able to understand the performance of their vehicle or home. So for home performance contractors, energy ratings validate their efforts, and the information provided to the homeowner in the scorecard or rating documentation helps make the case for taking action. That a homeowner can then disclose this improved score to future buyers of their home is a bonus for the informed consumer - buyers and sellers alike.

Chad Ruhoff, manager of Neil Kelly Home Performance, points out that while today's homebuyers are interested in the energy performance of homes, "most of them just don't know the right questions to ask yet, or if they do, they don't know whether they're getting the right answer." A carefully crafted energy rating and disclosure program can arm homeowners with a more specific understanding of the efficiency issues they are facing in their home. If the energy score helps them to identify the type and magnitude of the problem, even in a general sense, they are better able to ask the right people the right questions – and know if they're getting the right answers.

Ruhoff believes they come to home performance contractors to get an unbiased answer about how to resolve energy performance issues they

"Clients see an assessment as an unbiased way to get clarity on what needs to happen as far as the energy performance of their home. They think to themselves: 'We've got a problem, but we don't know what it is.' But when they call the window company, they say 'yes, it's your windows,' but the insulation company says it's the insulation. So they're looking for a roadmap without a bias."

> - Chad Ruhoff, Manager, Home Performance Division, Neil Kelly Company

⁴ The Cadmus Group. National Association of State Energy Officials Multi-State Residential Retrofit Program Baseline Survey Results – Washington, 2012.

suspect exist in their homes. "Clients see an assessment as an unbiased way to get clarity on what needs to happen as far as the energy performance of their home. They think to themselves: 'We've got a problem, but we don't know what it is.' But when they call the window company, they say 'yes, it's your windows,' but the insulation company says it's the insulation. So they're looking for a roadmap, without a bias." For home performance contractors, an energy rating provides a clear and potentially powerful way to provide consumers with the unbiased information they ultimately want.

Performance Contractors and Energy Ratings. A Dynamic Duo

Energy rating opens up a whole new realm of possibilities for the home performance contracting industry. Building science is complicated subject matter. An energy score can narrow the focus, but homeowners shouldn't be expected to diagnose these dynamic problems on their own. There is considerable agreement that the public needs more and better information in order to make the best choices about whether, how, and why to retrofit their homes. Energy scores, coupled with the performance contractor's expertise, can close the gap by providing a "roadmap" for what needs to be done and unbiased expectations as to the costs and benefits.

In the continued drive toward a whole-house approach where homes are healthier and more efficient, and where consumers understand the value of such, energy rating provides performance contractors with a win-win opportunity. They can not only help craft, but also share in the benefits of a well-designed energy scoring protocol. At the same time, their contributions help pave the way to a more efficient housing stock – and that's a win for everyone.

16

Real Estate Industry



Most everyone would agree that things are starting to look up in the regional real estate market. While the market is recovering, the progress has been slow and many homes still have not recovered their pre-2007 values. In this context, REALTORS® are looking for any advantage they can find to highlight the benefits of the homes they are selling and to provide their buyers with tools to help them better evaluate homes on the market. Energy rating and disclosure is one such tool that has provided some REALTORS®, and their clients, with a market opportunity.

77% of buyers agree that knowing the projected energy costs of a home is very important.

National Associationof Home Builders 2012"What Home BuyersReally Want" report

"For select buyers more information is always useful, and energy scoring provides additional information, and reduces future risk."

Teresa St. Martin,Windermere CroninCaplan RealtyGroup, Portland

It's true that the real estate industry has historically not been the biggest champion of home energy ratings. Yet over time some REALTORS® have begun to see benefit in a well-designed energy rating and disclosure system and are finding ways to incorporate the tool into their own business models. Whether in increased home values or better-informed and more satisfied clients, energy rating and disclosure is presenting an opportunity for some REALTORS®. As customers become more and more interested in the energy performance of homes, REALTORS® may see potential in an energy scoring protocol that is easily understandable, consistent, and transparent.

Consumers Want More (Energy) Information

Many buyers perceive a greater risk in purchasing a home than they did before the downturn. REALTORS® in the Northwest report that consumers are increasingly keen to have more information about a home before being willing to make an offer. With the foreclosure epidemic in the back of most buyers' minds, there is also a growing interest in information that will allow them to accurately determine just how much it will cost to live in and operate a home.

REALTORS® are already taking advantage of new forms of information that better apprise consumers and highlight the upside of certain homes. New systems such as Walk Score® (along with Bike Score and Transit Score) are being used with increasing frequency by REALTORS® throughout the Northwest. In this same way, energy rating and disclosure can add tremendous value to the real estate transaction. While providing sellers with a clear and quantitative way to showcase the energy improvements made to their home, energy ratings also arm potential buyers with assurances against the unexpected operational surprises that can creep up once they've moved in. Portland area real estate broker with Windermere Cronin & Caplan Realty Group Teresa St. Martin points out, "For select buyers more information is always useful, and energy (scoring) provides additional information, and reduces future risk."

And research supports the notion that there is interest amongst consumers for clear, accessible, transparent energy performance information. A 2012 survey of Washington residents shows that 64% of respondents thought a numeric scorecard that explained a home's current energy use would be useful. Robin Denburg, Portland and Seattle area Realtor with Windermere

¹ The Cadmus Group. National Association of State Energy Officials Multi-State Residential Retrofit Program Baseline Survey Results – Washington, 2012.

agrees: "For my clientele an energy rating system would benefit them because too often they don't understand the benefits of energy efficiency. An energy rating would create a nice baseline. Most clients will think, 'ok that's a bonus."

With many buyers facing increasing financial constraints, utility bills and other operating costs are a consideration now more than ever. A clear, well-designed program for home energy rating enhances market transparency by giving buyers more information with which to make their purchasing decisions. St. Martin makes the point that clarity is key. "A home is a big purchase, so the more information the better. In this sense (energy rating and disclosure) is useful. But it needs to be understandable."

Good Information: A Key to Unlock the Benefits of Energy Rating and Disclosure

There is growing interest in developing a consistent, regional, energy rating system that supports the needs and goals of consumers and industry professionals. A hodge-podge approach to energy rating with different standards, terminologies, and methodologies confuses the market and makes the job of a Realtor that much more difficult.

There are two components to an effective energy rating and disclosure program: there is the actual disclosure of energy information, but equally important is the type and quality of information contained within the disclosure. In other words, the disclosure must include an energy rating or score that is clear and easily comprehensible to homeowners. While having one of these components can be helpful, in order to truly be an effective tool for the market, a program should contain both elements – an energy disclosure as well as an informative energy rating. The city of Austin's Energy Conservation Audit and Disclosure (ECAD) program requires time of sale energy assessments for homes ten years or older, but does not utilize an energy rating or score. The challenge ECAD has had penetrating the market for home energy upgrades points to the usefulness of an energy rating. As Director of Government Affairs and Community Relations for Austin, Texas's Board of REALTORS®, Emily Chenevert, puts it, "more disclosure is better for REALTORS®, and also for homebuyers and sellers," but an energy rating that clearly informs the consumer and eliminates liability from all parties "would do wonders for the marketplace."

The experiences of REALTORS® in Austin, Texas, suggest that while a general energy disclosure policy can raise awareness amongst consumers about energy efficiency in their homes, an energy rating in concert with that disclosure elevates the discussion considerably and provides

"More disclosure
is better for
realtors, and also
for homebuyers
and sellers," but an
energy rating that
clearly informs
the consumer and
eliminates liability
from all parties
"would do wonders for
the marketplace."

— Emily Chenevert, Director of Government Affairs and Community Relations for Austin, Texas's Board of REALTORS® the kind of information consumers and REALTORS® want and need. A well-designed energy rating that the seller can disclose to buyers has the potential benefit of simplifying, or even eliminating, the Realtor's task of educating the homebuyer about a home's energy efficiency.

Over time and with growing awareness amongst consumers, the Realtor's role of explaining the results of Austin's required home energy assessments has gotten easier. But some Austin-area REALTORS® say that more could be done to limit the need for REALTORS® to explain the sometimes confusing energy assessment results to their clients. A clear and concise energy rating that conveys a numeric score and that supplements the score with credible and objective consumer information about home energy use, would remove the bulk of the responsibility – and the liability – from REALTORS®. With this type of energy label, consumers could draw their own conclusions about the home's energy use. Says Ben Kaufman, co-owner and managing broker at Seattle's GreenWorks Realty, "I've really found that consumers will choose better the more they know."

Energy Ratings and the Multiple Listing Service: A Powerful Combo for the Consumer

Why Austin's Board of Realtors supports Their City's Energy Disclosure Ordinance

The Austin Board of REALTORS® (ABoR) supports Austin's Energy Conservation Audit Disclosure (ECAD) Program because it "emphasizes educating the seller and the buyer, as well as allowing the recipient of the audit to voluntarily determine the priority of the retrofits." According to ABoR, the energy efficiency of a home "is important when determining a consumer's ability to afford a home. Because rising energy costs are an integral part of homeownership, ABoR supports energy conservation efforts" like the ECAD ordinance.

The issue of increased consumer information highlights a second benefit of a good energy rating mechanism. Ratings can allow consumers to differentiate between otherwise comparable homes. Homebuyers know how to use property data to make comparisons based on square footage, number of bedrooms and bathrooms, the estimated property tax, or even the walk score or proximity to public transit. They can do this because these features are reflected in a single metric (square feet, dollars, miles, etc.) and are accessible for nearly every house on the market. Comparisons are straightforward. Importantly, these simple metrics can then populate a multiple listing service (MLS) field, enabling homebuyers to make an apples-to-apples comparison of dozens of property features across every listed home on the market.

When it comes to making comparisons between homes, an energy rating could potentially offer the same benefits. As Chad Ruhoff of the Neil Kelly Company puts it "The more energy scores we have out there in the market, the more people will understand and have comparisons available so that they can judge a home's efficiency. Ultimately, the more awareness these scores have, the more likely a buyer is to say 'I want a score.' And this is

what we want – for the buyer to drive demand for scoring." Seattle Realtor Ben Kaufman of GreenWorks Realty also sees energy ratings as a way to improve his business, especially if those scores were recorded on the MLS. Because high performance homes see a sales premium (in some areas), an energy rating helps to support an increased bottom line for his company.

An energy rating is most useful if consumers have a way to compare them across homes. This is where the multiple listing service plays a role. A growing number of MLS's are including fields that convey the energy rating or score of applicable homes. According to a 2010 survey of MLS operators, out of more than 800 multiple listing services, more than 100 have adopted these so-called "green MLS" fields. A partial list of these areas includes Atlanta, Austin, Chicago, Houston, Phoenix, Portland, Seattle, and the Metropolitan Regional Information Systems (MRIS), which covers states in the Mid-Atlantic region, including Maryland, Virginia, Washington, D.C. and parts of Pennsylvania, Delaware and West Virginia. And that number is growing. An additional 24% of the MLS organizations surveyed are in the process of implementing a green MLS field, or have the issue on their agenda for discussion². And importantly, city and county governments are getting involved too. San Francisco now includes energy ratings on the official property records maintained by the city, according to Assessor-Recorder Phil Ting³, and Colorado's Boulder County is considering the same.

While a well-designed, practical energy scoring and disclosure protocol can create market opportunities for REALTORS®, a system that is cumbersome, that creates consumer confusion, and that presents barriers to already complicated real estate transactions, represents a liability to the realty industry. The bottom line is that for residential energy rating and disclosure to work for the Pacific Northwest, it must work for the region's real estate industry.

² Laureen Blissard, "Green MLS," Green Builder Magazine, April 9, 2012, http://www.greenbuildermag.com/ News/Green-Trends/Green-MLS#.UQsEoY5yxS8.

³ J.K. Dineen, "How Green is that Building? San Francisco City Hall Will Tell You," San Francisco Business Times, Nov 29, 2012, http://www.bizjournals.com/sanfrancisco/blog/real-estate/2012/11/ how-green-is-that-building-city-hall.html.

Remodeling Industry



For such an innocuous sounding subject, it sure has people talking. Energy rating and disclosure – in one form or another – is being discussed or pilot tested at state and local levels around the country. As residential energy rating programs roll out across the Pacific Northwest¹ there is a growing awareness of the need for consistent rules and standards to increase overall effectiveness of these types of strategies in the marketplace. Both the building industry and consumers would benefit from a uniform approach. Remodeling contractors are becoming keenly interested in learning how these programs can be used to best serve their interests and boost business.

¹ Piloted voluntary energy scoring programs exist in: Energy Trust of Oregon territory, Kitsap County, WA, Thurston County, WA, Snohomish County, WA, Bellingham, WA, Spokane, WA, and Seattle, WA.

"...in the future [energy scoring] will be as important as miles-per-gallon. It's inevitable we're moving in that direction."

- Sam Hagerman, Owner of Hammer and Hand

More than 40% of the owner-occupied housing stock is at least 40 years old

-American Housing Survey

What Consumers Are Saying About Home Energy Ratings

It's fair to say that home energy rating isn't playing much of a role in consumer decision-making...yet. At this point few consumers are asking to see a home's energy score before buying. But tellingly, research is finding that consumers are interested in the concept of energy rating and see plenty of potential benefits. According to a 2012 survey of Washington residents, 64% of respondents thought an energy scorecard that explained a home's current energy use would be useful to them.² And as Jon Girod, owner of Quail Homes notes, while "consumers aren't asking to see a home's energy score right now," once they know more about how an energy efficient home performs, how it not only saves money on energy bills, but it feels, sounds, and even smells better than less efficient homes, "they all want to know more." Girod finds that energy ratings – or performance scores – help in substantiating this message.

Remodelers in the region will vouch for that. Stephen Aiguier of Portland's Green Hammer, believes that "energy efficiency is becoming better understood and more important to the average consumer." So what does all this mean for the opportunistic home remodeler? Consider that since 2007, stagnant and in some cases declining home values, combined with a credit crunch have meant that many would-be homebuyers are staying put. Consumers who are becoming more energy conscious are also increasingly remaining in their older, less energy efficient homes. It's not hard to see how this presents an opportunity for the remodeler, whether or not they have a direct stake in the energy efficiency marketplace.

According to data from the 2009 American Housing Survey³ (AHS), the median age of an owner-occupied home was 34 years old, up 11 years in age from the 1985 AHS. According to the same data, more than 40 percent of the owner-occupied housing stock is at least 40 years old. As Robert Dietz an economist with the National Association of Home Builders (NAHB) states, "The growth outlook in the remodeling industry remains positive in the long run given the aging housing stock and homeowners' preference to improve the performance of their homes. With a rising desire for better-performing homes in terms of water and power use, increased demand for home improvement services will follow."⁴

² The Cadmus Group. National Association of State Energy Officials Multi-State Residential Retrofit Program Baseline Survey Results - Washington, 2012.

³ U.S. Department of Housing and Urban Development, Office of Policy Development and Research and U.S. Department of Commerce, Economics and Statistics Administration. American Housing Survey for the United States: 2009, March 2011. Retrieved from http://www.census.gov/prod/2011pubs/h150-09.pdf

⁴ Robert Dietz http://www.usnews.com/news/blogs/home-front/2013/01/03/why-americas-aging-houses-are-a-good-thing

Home Remodelers See Opportunities with an Energy Rating Program

For those remodelers who do see market opportunity in energy efficiency, they view energy scoring as a critical tool in supporting their business model.

CASE STUDY

Remodelers Prove Their Value with Energy Scoring

Green Canopy, a Seattle-based remodeling firm led by Aaron Fairchild, uses energy scoring to verify the effectiveness of the energy efficiency work it does on gut remodels of homes that they later sell. The firm markets a "miles per gallon" rating that measures both the energy performance before and after the remodel. This process shows quantitatively and definitively the efficiency gains of their remodeling work.

For example, a home Green Canopy renovated on Beacon Hill in Seattle, started with an average energy usage of 25,000 kWh per year, but after retrofit work, usage reduced to 12,000 kWh per year – and that was after the firm nearly doubled the square footage of the house. The score tells both the remodeler and prospective buyers that they were successful in increasing the efficiency of the home.

"We want to push the envelope in the building sector" said Fairchild. "We believe the real estate market will benefit from homebuyers knowing how efficient a given home is - especially when they can then relate the score to another home for an apples to apples comparison." If a seller's home is currently inefficient, they can take measures to improve the scores, and use the improved performance as a valuable selling point. Homebuyers and sellers win with this type of information.

The way the firm sees it, for homebuyers an energy score is just another valid piece of information that buyers deserve as they make a major purchase decision. An energy score may help to tease out some important information about the quality of the home.

Green Canopy believes that as valuable data such as energy scoring becomes more commonplace in the residential market, consumers will come to demand this sort of information—and the efficiency measures that drive the scores upwards. Indeed, they have staked their business on it.

Sam Hagerman of Portland and Seattle's Hammer and Hand believes that "some sort of energy (rating) is crucial to support increased valuation of high performance homes." In his view, and in the view of others like Green Canopy of Seattle (see sidebar), an energy scoring system can help support and document the true value of energy efficiency.

So how does an energy rating program benefit the remodeling industry? Most of us agree that a home that is more energy efficient, more comfortable, more durable, and has healthier indoor air is a good thing. While some remodelers aren't ready to go all in on the home performance retrofit market, if a customer comes to them with a specific request, they will get the job done or find a subcontractor who will. It's clear that for some in the industry, there is a concern that energy scoring is just one more complication in an industry already accustomed to permits, insurance, and other regulatory obligations. As Jim Kitchin, owner of InterWorks Remodelers in Portland, points out: "People in my industry view energy efficiency and building science as a moving target. To keep up with all the advancements, they have to make the effort to stay informed [on the latest methods and technology]." And the current lack of consistency amongst various energy scores, programs, and methodologies amplifies some of the fears of these remodelers. However, Kitchin sees energy scoring becoming more and more important to the consumer and, as he puts it, "the consumer drives what we do. We have to respond to their demands."

With a clear and well-structured scoring and disclosure system in place, energy ratings should be a gain for those in the remodeling industry. Like the miles per gallon (mpg) standard for automobiles, energy ratings advance the case for more energy efficient homes by providing the consumer with information they can choose to use in their purchasing decisions. Energy scoring is a tool that can be used by remodelers to generate greater interest in home remodeling projects. It is a concept that can help move the market toward improving the energy performance of homes – and toward those, like remodeling contractors, who can deliver on that opportunity.

Because of the consumer consciousness surrounding it, the mpg comparison is a good one to make. While energy scoring is trending towards the kind of market awareness of the automobile mpg, consumers who come into contact with energy scoring are sometimes befuddled, both because of unfamiliarity and because of the multiple brands associated with scoring. As Fiona Douglas-Hamilton, founder of Washington's Social, Environmental, and Economic Consulting (SEEC) LLC points out, "There is relative confusion [in the marketplace] regarding the various energy ratings and scores. We have to solve this issue." Additionally, different scoring methods often can't be compared in an apples-to-apples way, and in some cases the scoring metric is not intuitive to the average consumer. Creating uniform standards that address these issues will provide real benefit to the remodeling industry by creating more market interest in undertaking home renovation projects. Energy scoring increases consumer information about home energy – its costs, how much is wasted, and how one home compares to another.

will benefit from
homebuyers knowing
how efficient a given
home is - especially
when they can then
relate that score to
another home for
an apple to apples
comparison."

"We believe the

real estate market

Aaron Fairchild, CEO of Green Canopy

Moving Toward Energy Scoring. "It's Inevitable."

True, energy scoring can be confusing if not done right. Yet an energy rating and disclosure system that supports regional uniformity will be able to iron out procedural inconsistencies and designate a consistent set of ground rules. An energy score can only be as meaningful as the methodology that derives it. It advantages the remodeling industry to support consistent "rules of the road" that enable an energy rating system that is accurate, reliable, and easily comprehensible by contractors and consumers alike.

Many remodelers are now realizing that energy scoring in some form is the wave of the future. As Hagerman of Hammer and Hand states, "At this point, there isn't the consciousness surrounding the benefits of energy efficiency for the average consumer to care [about energy scoring]. But in the future it will be as important as milesper-gallon...It's inevitable that we're moving in that direction."