A Communications Strategy for HERD

Ann Arbor's Home Energy Rating Disclosure





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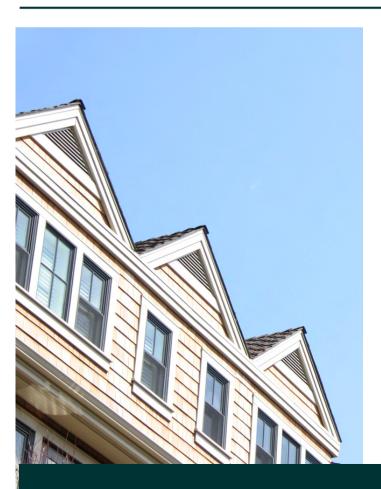
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Special Thanks

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Overview

This communications strategy was designed to guide the creation of a suite of materials that will help Ann Arbor's Office of Sustainability and Innovation (OSI) socialize the Home Energy Rating Disclosure (HERD) ordinance with appropriate audiences, including home sellers, home buyers, and real estate agents. This communications strategy is designed to function alongside separate political, legal, and administrative development and strategy.

Background

State and municipal governments across the United States have adopted policies that mandate or encourage residential energy disclosures. A residential energy disclosure makes information about a home's energy use available to the public and is particularly useful for home buyers. Energy disclosures can be mandatory or voluntary. They can require sharing utility bills or obtaining a home energy rating.

Ann Arbor is pursuing the Department of Energy's Home Energy Score, one of several types of ratings. The Home Energy Score evaluates fundamental characteristics of a home, so unlike utility bills, the data are not affected by occupant behaviors or temporary appliances. This rating assigns a value of 1 to 10 to a home's energy efficiency, with 10 representing the most efficient homes. It is an apples-to-apples tool for comparing energy use across homes, similar to a miles-per-charge rating for an electric vehicle. It is more convenient and affordable than other rating assessments. It also provides actionable suggestions for recommended improvements.

Ann Arbor previously attempted to pass a home energy rating disclosure ordinance, but due to backlash (particularly from real estate professionals), the OSI pulled the initiative before presenting it to City Council. Now, HERD has political support from members of the Energy Commission and much of City Council. Reflecting on the last attempt to establish HERD, the OSI wants to develop key messaging to socialize HERD before and after the ordinance passes.



Examples of the front page and the recommendations page of a Home Energy Score Report.



Learn more at homeenergyscore.gov



The **Home Energy Score** is a national rating system developed by the U.S. Department of Energy. The Score reflects the energy efficiency of a home based on the home's structure and heating, cooling, and hot water systems. The **Home Facts** provide details about the current structure and aystems. **Recommendations** show how to improve the energy efficiency of the home to achieve a higher score and save money.

OFFICIAL ASSESSMENT | Assessor ID 101019 | Assessed on Nov 20, 2015 | Label ID# 99011 | v2015

Add	tress: 12345 Honeysuckle Lane Smithville, AR 72466	
	Repair now: These improvements will save you money, conserve energy, and improve your comfort now	Estimated utility bill savings (Syear)
	Attic 1 / Increase attic floor insulation to at least R-49 Ducts 1 / Add insulation around ducts in unconditioned spaces to at least R-6 Ducts 1 / Have your ducts professionally sealed to reduce leakage	187 71 171
	Replace later: These improvements will help you save energy when it's time to replace or upgrade	Estimated utility bill savings (Syear)
	Furnace 1 / Pick one with an ENERGY STAR label Central Air 1 / Pick one with an ENERGY STAR label	106 80
	Water heater / Pick one with an ENERGY STAR label	34

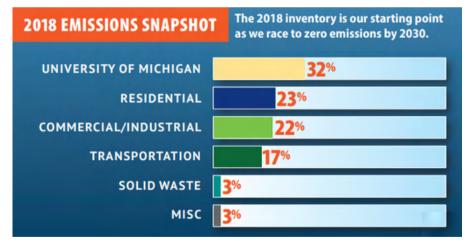
Graphic from U.S. Department of Energy, Better Buildings Solution Center

HERD and Ann Arbor's Climate Goals

In June 2020, the city of Ann Arbor officially adopted <u>the A2ZERO Carbon Neutrality</u> <u>Plan</u> to achieve a just transition to community-wide carbon neutrality by 2030.

According to the U.S. Environmental Protection Agency, commercial & residential energy use contributed 13% of U.S. greenhouse gas emissions in 2020 (U.S. EPA 2022). <u>Some studies</u> <u>have placed residential emissions</u> <u>much higher</u>, at roughly 20% of the total (Goldstein et al. 2020).

Ann Arbor's 2018 inventory of greenhouse gas emissions ranked residences as the second-largest contributor, responsible for 23% of the city's total emissions (A2ZERO Fact Sheet). Residences are responsible for 23% of Ann Arbor's total greenhouse gas emissions.



From A2ZERO Fact Sheet

GOALS

Communications Goals

Communications is one piece of the entire HERD strategy, alongside political, legal, and administrative development. Communications can assist with the following goals.



Outputs

What will we produce?



Outcomes What results do we want?

- Template and content for a HERD website hosted on A2gov.org.
- HERD mailers, fliers, yard signs, press releases, and one-pagers for distribution.
- Slide deck template for trainings.
- · Communications strategy (this document!).
- Bibliography of relevant studies and literature.
- Significant seller compliance with HERD.
- Real estate professionals attend city training and are knowledgeable about HERD.
- Significant requests from new homeowners to obtain a Home Energy Score.
- Significant requests from sellers and real estate professionals for free or reduced assessments, if offered for a limited time.
- Communications materials mitigate misinformation.
- Smooth program implementation, with minimal complaint and administrative burden.
- Energy professionals become trained as Home Energy Score assessors, build up workforce.



Impact

What long-term change should we see as a result?

- Homeowners use the actionable steps in the Home Energy Score to upgrade their home's inefficiencies.
- Home Energy Scores are reflexively recognized and understood.
- In a measurable period (5-10 years), Home Energy Scores in Ann Arbor trend upward.
- In a measurable period (5-10 years), greenhouse gas emissions from the residential sector decrease.

Style Guide

Editorial and style choices to serve our audiences and goals.

Names

- A2ZERO, ideally with a superscript "2"
- Ann Arbor Area Board of REALTORS® (AAABOR)
- Department of Energy (DOE)
- Home Energy Score (HES), first letter of each word capitalized
- Home Energy Rating Disclosure (HERD). HERD is a public-facing acronym, but best practice is to closely follow it with the full phrase
- Multiple Listing Service (MLS)
- Office of Sustainability & Innovations (OSI)

Word choice

- Use **real estate agent**; REALTOR® is a trademarked term.
- Use **home sellers**, not homeowners, to clarify that the HERD requirements are triggered by sale and not required of all homeowners.
- Use miles-per-charge rating for an electric vehicle, not miles-per-gallon rating for a car, when offering equivalent rating systems.
- Home sellers are required to obtain a Home Energy Score, but they are not required to **achieve** a certain score.

Branding

- Light green: HEX #98cb32 / RBGa: (152,203,50,255) Note: this color fails an ADA color compliance test on a white background, and should not be used for standalone text.
- Dark green: HEX #003232 / RGBa: (0,50,50,255)
- Font: Codec Cold Extra Bold
- A tentative HERD logo was designed in Canva Pro, and features the A2ZERO logo wrapped in the silhouette of a home. <u>Use of the A2ZERO logo is strictly prohibited</u> <u>without written permission from the OSI Manager.</u>
- This is accompanied by the City of Ann Arbor seal, which adds further legitimacy to communications.





Methods & Development

Phases of Building the Strategy

The Catalyst Leadership Circle Fellowship (CLCF) provided resources to devote time and effort on developing a communications strategy for HERD. The first several weeks of the CLCF focused on **research**, **literature review**, **and scoping**. The OSI provided guidance in the form of past relevant resources and access to workshops and materials. The second phase was identifying **key audiences in Ann Arbor**, drafting **initial key messaging**, and brainstorming **distribution tactics**. Several following weeks were spent in a third phase of **stakeholder interviews**, refining key messaging and access points to our key audiences. This phase coincided with drafting - and continually refining - public materials for HERD, including a website mockup, fliers, postcards and mailers, one-pagers, a slide deck, and two draft press releases.

Resources & Research

Studies and literature: Market research, industry research, and academic studies have contributed to the literature on home energy rating disclosures and the Home Energy Score. The bibliography of this document includes reports detailing health impacts, climate impacts, energy improvement adoption trends, real estate trends, and seller benefits. All of these inform key messaging.

Government resources: The Department of Energy's <u>Better Buildings</u> <u>Initiative</u> is the online portal to Home Energy Score-related fact sheets, history, and data. <u>The Green Building Registry</u> is a national database of energy-audited homes and buildings, including those that have received a Home Energy Score.

Organizational resources: Organizations like the <u>Rocky Mountain Institute</u> (now known as RMI), <u>EarthAdvantage</u>, and <u>American Council for an</u> <u>Energy-Efficient Economy</u> have assembled relevant policy toolkits, workshops, and resources, many of which can inform key messaging and communications strategies.



METHODS & DEVELOPMENT -

Case Studies: There are different approaches to home energy disclosures across the country (and globe). Some programs are mandatory while others are voluntary or pilot programs. Some require ratings. Others simply disclose past utility bills. Despite differing local context, each program's public-facing communications are useful in developing our key messaging and communications strategies. For example, <u>Denver, Colorado's pilot evaluation</u> provides ideas for distribution, including asking new homeowners to receive Home Energy Scores to achieve maximum impact (City and County of Denver, 2019). Portland, Oregon's ordinance is probably the most similar to Ann Arbor's proposal in that it also uses the Home Energy Score and is triggered by time of listing. Portland's <u>website</u> and <u>30-month program evaluation report</u> are excellent resources ("Report to Portland City Council," 2020).



Stakeholder Interviews

We conducted interviews with stakeholders and potential program partners who both asked and answered important questions, helping us develop and refine our key messaging.

We engaged with Home Energy Score Partners from <u>Walker-Miller Energy Services</u> (Detroit) and the <u>GreenHome Institute</u> (Grand Rapids). Representatives from the Green Building Registry answered questions about Home Energy Score data privacy via email. We also interviewed homeowners within Ann Arbor, including an A2ZERO Ambassador and their spouse and a University of Michigan professor whose research specializes in environmental psychology. Internally, Galen Hardy, the manager of the A2ZERO Ambassador program, discussed strategies to integrate HERD into A2ZERO. Further interviews with real estate and building industry professionals are recommended in the second stage of stakeholder engagement.

Strategy for Communications

This communications strategy for HERD is built on a foundation of years of past effort and engagement. At the time of this strategy's publication (July 2022), the OSI had already laid robust groundwork with stakeholders. The Energy Commission is favorably disposed toward HERD, and there are indications that City Council has the political will to pass a HERD ordinance quickly, bypassing a dedicated pilot or long-term voluntary program. Communications and outreach were developed with this political landscape in mind.

Voluntary vs. Mandatory Disclosure

The OSI does not wish to surprise any audiences or residents with with an unexpected or alarming disclosure policy. This communications strategy focuses on a mandatory ordinance's socialization post-adoption in a political environment where the ordinance is likely to pass, but the OSI values transparency during this process. This prompted a recommendation to distribute HERD information publicly by introducing it as a voluntary program, while acknowledging that it has the potential to become mandatory through city ordinance. Communications around HERD thus require multiple versions of documents that can speak to it as a voluntary program that residents are encouraged to participate in, and, eventually, as a mandate with specific compliance procedures (to be determined by the City).

A voluntary program does not drive the market transformation that HERD hopes to achieve. Sellers who voluntarily disclose may reap the benefits associated with energy disclosures (see page 21), but it is unlikely that sellers with low-scoring homes will opt to disclose, and presenting energy information for only the most efficient listings is not effective in encouraging buyers to consider energy-efficient homes (Sussman et al. 2020). Home buyers remain vulnerable when energy information is withheld, and a voluntary disclosure is less likely to motivate improvements that will lead to emissions reductions.

Stages of Stakeholder Engagement

This strategy document focuses on communicating the value of home energy rating disclosures to multiple audiences. It should operate alongside, and not replace, engagement strategies that consult stakeholders on policy development (see Next Steps). In writing this document, we consulted homeowners and potential energy partners to create and refine messaging. Although we did not interview members of the real estate community in summer 2022, real estate agents are a key audience for any residential energy disclosure strategy, as it effects their business model, workflow, and livelihoods.

In their 2019 workshops on home energy disclosure policies, experts from RMI and EarthAdvantage advised different timelines for engaging with real estate agents depending on the level of political support (RMI, September 25, 2019). In communities like Ann Arbor, where political support already exists for a disclosure policy, RMI and EarthAdvantage recommended delaying real estate outreach for a later stage of stakeholder engagement. In this political scenario, they stressed the benefit to developing policy goals and key messaging first, and warned about the risk of generating misunderstanding or mobilizing opposition too early. The workshops referenced Berkeley, California as an example of how early negotiation with agents resulted in a Home Energy Score deferral option that, in their opinion, weakens the ordinance's impact (RMI, September 25, 2019; for more on Berkeley's deferral, see Roy et al. 2018).



This screenshot from the Rocky Mountain Institute's workshop (September 25, 2019) displays an image from a Massachusetts real estate association's opposition campaign.

For this communications strategy, we chose to develop our key messaging and draft output materials first for three reasons:

- 1. In prior conversations with the OSI, real estate agents suggested that OSI staff would be more successful by engaging their client base particularly home sellers first. We developed communications with that directive in mind.
- 2. We wanted our communications to be well-researched so we are prepared to answer questions and concerns, while remaining receptive to suggestions from the real estate audience in future stakeholder engagement.
- 3. We preferred to engage this audience together as a whole, rather than favor certain agents or agencies with early access to information about HERD.

Collaboration with Real Estate

In communities with an uncertain level of political support for a disclosure policy, RMI and EarthAdvantage recommended identifying real estate agents who may favor the policy first, seeking their advice, and persuading them to support it. RMI suggested contacting agents with green credentials, such as the National Association of REALTORS® Green Designation (Miller 2017). In previous years' efforts and outreach surrounding HERD, the OSI had already identified real estate agents who specialize in sustainability and who could be potential allies to HERD. The OSI had also previously cultivated contacts with the Ann Arbor Area Board of REALTORS® (AAABOR).

Governments in an early stage of developing a disclosure policy can compare the approaches of Berkeley, California and Portland, Oregon in "Learning the Score," a report that shares lessons from these cities' engagement processes and includes the primary concerns voiced by area real estate agents (Roy et al. 2018).

Real estate audiences have traditionally opposed home energy disclosure ordinances, including, to some extent, in Ann Arbor. A 2019 article in the Ann Arbor Observer quotes a member of AAABOR expressing disappointment at the OSI's assumption that agents would support home energy disclosures (Halpert 2019). Nonetheless, Ann Arbor's real estate community should be approached as potential collaborators when the policy is developed. Inviting enthusiastic agents to lead trainings or speak on behalf of HERD can establish trust and credibility. These agents can also speak personally to the value of selling energy-efficient homes, including the potential for higher commissions due to "green" premiums (see page 21). Finally, the OSI will require agents' support in developing up-to-date HERD compliance instructions for this audience. For example, Portland, Oregon's <u>compliance how-to manual</u> effectively uses screenshots for real estate agents to visually understand how to download and post a Home Energy Score in the MLS and all public listings.

In addition to countering arguments against HERD, key messaging for the real estate community should describe the benefits of HERD beyond sales premiums. The OSI has the potential to link real estate agents to continuing education credits (courses on energy efficiency or the Home Energy Score are available through <u>InterNACHI</u>, the <u>National</u> <u>Association of REALTORS®</u>, and <u>EarthAdvantage</u>), to offer time-limited gifts of assessments to real estate agents to pass on to their new clients, and more.



Agents who participated in RMI and EarthAdvantage's workshops offered the following pieces of advice which can be adapted to Ann Arbor's context for HERD (RMI, October 24, 2019):

- · Leverage the angle of sustainability. Real estate associations, like any professional association, need new ideas to embrace, new talking points, and new ways to engage with their members and take leadership roles in the marketplace. There is evidence that both agents and buyers value sustainability (National Association of REALTORS 2022®: The Demand Institute 2013), and agents will look to associations like AAABOR to champion this angle.
- That said, doom-and-gloom predictions and dire messaging can backfire.
- Remember that real estate agents are not short-term strategists, but long-term engagement professionals.
 Frame HERD as ensuring long-term sustainability for Ann Arbor's housing stock and the potential for resale well into the next century.
- Find partners in the community. Start a quarterly green roundtable with the MLS, a builders' group, an affordable housing group, an energy group, and other stakeholders.



A <u>"Home Heroes" infographic</u> developed by RMI and the National Environmental Education Foundation (NEEF) for real estate. A link to the full infographic can be accessed in the bibliography.

Workshop: Addressing Common Concerns

RMI and EarthAdvantage included the following common real estate arguments and counterpoints in their workshop (RMI, October 24, 2019). Statistics originate directly from this workshop.

Home energy labels are bad for business.

Anecdotal evidence from Portland, Oregon reports zero lost or delayed deals; home energy rating disclosures have the potential to attract "green premiums" (see page 21).

Home energy labels harm vulnerable communities, who may live in inefficient housing.

Current appraisal methods find energy efficiency to be only additive to a home's value. While it is possible an old home with years of deferred maintenance may receive a low Home Energy Score, it's also possible that a large, luxury home with high energy use will receive a low score.

The labels accomplish nothing.

According to RMI and EarthAdvantage, 7-37% retrofit rates have been achieved in existing home energy labeling programs. This ordinance targets a culture shift, not necessarily immediate improvements done in the first year of the program. Additionally, government messaging should point residents to the financing resources available for energy upgrades.

A Home Energy Score is not accurate.

Studies have shown that the Home Energy Score predicts energy use with great accuracy; the tool is continually being improved by national laboratories. (Although not mentioned in the RMI workshop, HERD spokespeople can note that the U.S. DOE requires a quality assurance review of at least 5% of randomly selected Home Energy Scores on a quarterly basis [U.S. Department of Energy, "Provide Quality Assurance for Home Energy Score"]).

Home energy labels are a government racket.

The city does not make money on this, but it likely will spend money on it. Administration of programs generally exceed any potential fines collected for noncompliance. The fees and costs of assessments are pushed to the private market.

A recession is looming, so this is a bad time to introduce the Home Energy Score.

The possibility of a recession makes a consumer protection policy all the more valuable, especially for energy-burdened home buyers and homeowners.

Incentives for Education or Impact?

We asked homeowners and energy professionals for their opinions on where funding and incentives would make the most sense: at the outcome/assessment stage, by offering free or reduced assessments for home sellers, or at the impact stage, by subsidizing some home improvements after sellers receive a Home Energy Score. Interviewees preferred free or reduced assessments for some duration of the program, despite the fact that assessments, at a current approximate cost of \$400 (Little 2022)*, are less expensive than most home improvements. This feedback is reinforced through news articles from Michigan in favor of free energy audits (CBS Detroit 2012) and anecdotal evidence from real estate agents in Portland (RMI, October 24, 2019). The rationale for budgeting for free or reduced assessments, even for a limited time, is:

- Education. A free assessment is an easy way to educate about HERD, the Home Energy Score, and other key messaging, including climate goals.
- **Exposure**. Residential energy labeling is a new concept for many people. Early exposure has the potential to create a dynamic norm. (As one interviewee put it, "You never used to think about grams of sugar until there were Nutrition Facts labels.")
- Strong start to data collection. Launching HERD with a high number of assessments develops a baseline understanding of Ann Arbor's Home Energy Score averages and the improvements our homes need. This data can inform future funding for impact investment.
- Excitement. A2ZERO Ambassadors suggested that providing free or reduced assessments, at least to Ambassadors and other community leaders, would smooth the entry of the program and foster goodwill between those leaders and the town. It would encourage Ambassadors and community leaders to be vocal proponents of the program, and establish credibility for HERD and the Home Energy Score.

The Department of Energy's Better Buildings Residential Network has created a Designing Incentives Toolkit (U.S. Department of Energy "Designing Incentives Toolkit"), which includes strategies on choosing financial or non-financial incentives, matching incentives with the desired behavioral outcome, and partnering with contractors for a successful rollout. An associated presentation on Effective Incentive Structures recommends ways to spur action, especially by offering time-limited or expiring incentives (Billingsley 2012).

Key messaging on incentives must operate completely independently from proposed messaging on HERD's equity measures, which may include sustained free or reduced assessments for income-qualifying residents (to be determined by the City).

*This estimate considers current rates of inflation and is subject to change. In cities where the market for Home Energy Score assessments has stabilized, \$200 is a closer estimate; Portland's "Report to City Council" (2020) quotes \$125.



A Third Way to Incentivize?

Longtime Ann Arbor resident and University of Michigan environmental psychology professor Raymond De Young cautioned against short-sighted use of incentives, citing three specific ways that incentives can harm a program.

- Gamification: Tokens-for-recycling programs in other municipalities produced mixed results as residents tried to maximize the value of their tokens in ways that did not benefit the programs.
- Alienation: Offering money for pro-environmental behaviors that many residents already practice risks alienating residents who feel their motivation for environmental action is not understood.
- **Misguided impact**: Subsidizing improvements may result in homeowners prioritizing improvements that are most attractive on a real estate listing, but don't have the greatest climate impact in the short or long term.



Instead, Professor De Young advocated strategically using a HERD budget to incentivize a team of community educators who will train their neighbors, rather than investing only in the "technology" (the assessments or improvements). This may have the added benefit of cultivating a dynamic norm (see below). "Humans are looking for anyone who's tried something new," said De Young. "If someone has pulled it off, we're drawn to them; we see them and may say, 'They're like me, so I should give it a try."

The outcome in this scenario is mobilizing a citizenry already embedded in each neighborhood. After receiving a free assessment or another incentive for HERD training, these "zero responders" should host trainings and troubleshoot problems with their neighbors. A2ZERO Ambassadors are already embedded within the community and have potential to serve in this role.

This is a long-term strategy that would require the OSI to educate A2ZERO Ambassadors and other candidates about HERD.

"Don't put money in the technology; put it in the creativity of the people."

- Professor Raymond De Young

Energy Scores & Improvements: Dynamic Norms

Social norms powerfully influence human behavior. Norms tend to be more durable than incentives in sustaining behaviors, and interventions that influence norms also "spill over" to affect an audience larger than just the initial recipients. But how can Home Energy Score adoption, and subsequent energy efficiency improvements, become a social norm when few people currently participate?

Professor De Young suggested a dynamic norm model for HERD messaging. The theory of dynamic norms proposes that people are more likely to adopt a new behavior (or join a movement) if they perceive that the new behavior is gaining popularity rapidly, even if current uptake is low (Loschelder et al. 2019). The dynamic norm model has been used to explain actions ranging from the growth of corporate investment in plant-based foods to the rapid decrease in individuals purchasing long-haul flights.

- "Sustainable real estate development...[is] an entire movement, and it's growing in popularity." (Esajian, n.d.)
- "More than 20,000 Home Energy Scores are now in the Portland real estate market, providing unprecedented transparency, insight and data about residential energy performance and carbon emissions." (Report to Portland City Council 2020)
- "Consumer preferences are diverging based on generation, with baby boomers looking to age in place and millennials becoming the largest share of home buyers with their own demands. Numerous residential energy technologies—including rooftop solar, LED lighting, programmable thermostats and appliances, heat pumps, and battery storage—are becoming commonplace and sought-after in homes." (Miller 2017)

The steep slope of a dynamic norm commands public attention. This norm can be implemented in key messaging for most target audiences, who may be motivated to join a vanguard of energy-savvy homeowners, buyers, and real estate professionals.



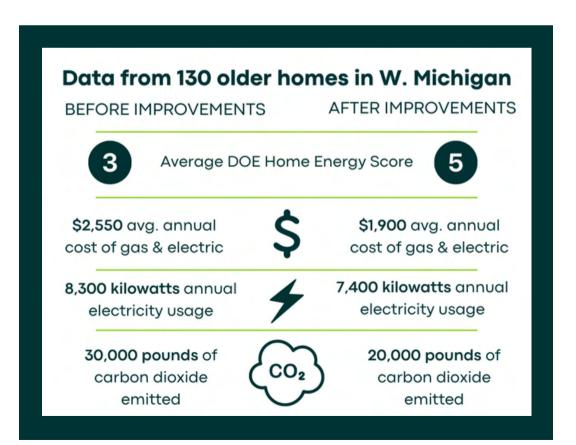
Communicating Local Outcomes & Impact

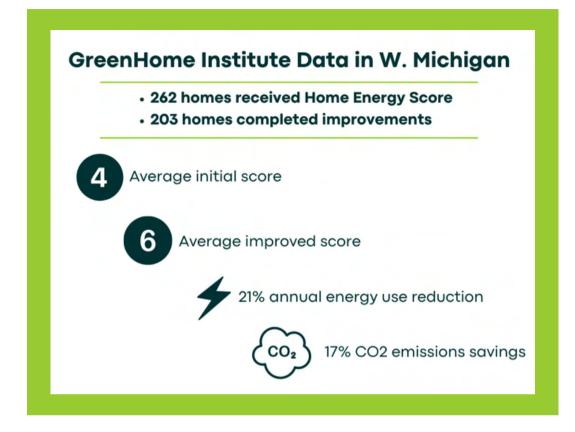
Ideally, a voluntary HERD launch will quickly generate successful outcomes in the form of Home Energy Score assessments, satisfied homeowners, and perhaps even improvements. A2ZERO Ambassadors, supportive real estate agents, and residents are the ideal source of testimonials and success stories, but these will take time to cultivate. Existing media can fill the gap and serve as positive messaging outside of the organizations and governments who have a stake in HERD's success (like the OSI or the Department of Energy). The Washington Post's 2018 article on the value of a home energy audit is a good resource to incorporate into messaging. Eventually, press releases from the OSI (draft included in the Appendix) should welcome media attention for HERD specifically.

"<u>Home energy audit: The best money I've</u> <u>ever spent</u>"

- Danielle Douglas-Gabriel, the Washington Post, 2018

Although Ann Arbor will be the first municipality in Michigan to require a Home Energy Score disclosure, regional data does exist, and makes it possible for audiences to learn from Michigan's own communities and not just cities like Portland, Austin or Berkeley. Evaluations from West Michigan are an excellent proxy to communicate regional impact in webinars and one-pagers. The graphics below and on the following page were prepared using figures provided by the GreenHome Institute (Little 2022); please contact the GreenHome Institute for further details and instructions on sharing this data.





Buyers' Markets and Sellers' Markets

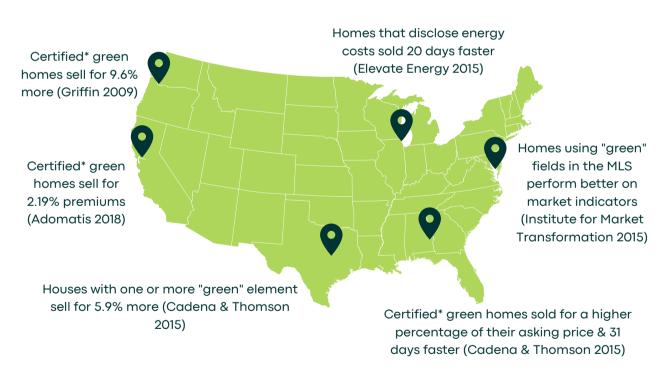
Current case studies of home energy rating disclosures often originate from sellers' markets. In cities like Portland, where housing prices have climbed steadily for years (Redfin, n.d.), it's logical that a low Home Energy Score does not deter a buyer, which influences key messaging. Denver's Home Energy Score Pilot Evaluation report noted that "Denver is a seller's market and that due to this [sellers] were not motivated to make improvements, though if it were to become a buyer's market the motivation to make improvements from sellers would likely increase" (City and County of Denver 2019).

Homeowners in Ann Arbor expressed concern that if the market transitions in favor of buyers, HERD could result in financial loss, either due to unfavorable comparisons with higher-performing homes or due to pressure to undergo energy improvements.



Indeed, a goal of HERD is to motivate homeowners to make energy improvements that keep their homes competitive in the marketplace. Key messaging for HERD is comfortable with this tension, but spokespeople for HERD must be nimble in acknowledging the different (but not contradictory) evidence. While home energy disclosures have overall been beneficial for sellers — for example, even homes disclosing high energy costs sell more quickly than homes that do not disclose costs at all (Elevate Energy 2015) — there is also evidence that "green" homes do command desirable premiums in a sale (see graphic below). And even before a sale is initiated, buyers click more often on real estate listings advertising energy-efficient homes, according to an empirical study conducted by the ACEEE (Sussman et al. 2020).

Messaging regarding the financial benefits of disclosure can weaken in a fluctuating real estate market, but HERD's premise of reducing emissions and promoting energy transparency remains. Strongly aligning HERD messaging with the community's core value of a just transition to carbon neutrality by 2030 provides continued robust justification.



*Green certifications recognize achievement of specific sustainability thresholds. Popular examples include Energy Star and LEED.

Graphic adapted from the U.S. Department of Energy's "Energy Efficiency for Real Estate Professionals" PowerPoint presentation, May 24, 2018. For more research on green premiums, see Energy Fit Homes' "Summary of studies on resale premiums for energy efficient homes:" https://www.mncee.org/sites/default/files/2021-11/Summary%20of%20Green%20Premium%20Research%20Studies.pdf

Individuals, Not Just Consumers

Homeowners are concerned that receiving a low Home Energy Score may result in feelings of defensiveness, guilt, and frustration with HERD. Many existing resources coach real estate agents (and sellers) on how to sell low-scoring homes, often focusing on the benefits of disclosure but rarely addressing feelings of guilt or blame (U.S. Department of Energy, "Home Energy Score for Real Estate"). HERD can go further by recommending that Ann Arbor's real estate agents shift focus toward a low-scoring home's other sustainable features, such as a rain garden, cold rooms for food storage, a high walk score, or short distance to transit.

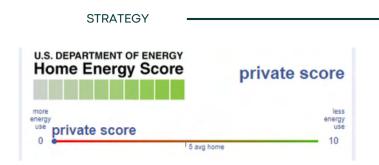
Real estate professionals can remind buyers that, while purchasing a home is a one-time event, living well within that home is an everyday event. Here HERD can amplify the OSI's existing messaging on <u>energy-efficient daily behaviors</u>. Professor De Young compares this to the "nature vs. nurture" debate: a Home Energy Score, representing the physical structure of the home, represents "nature" while individual energy-saving behaviors are "nurture;" both are important. Messaging that empowers homeowners to adopt energy-saving practices can also encourage investment in home energy improvements.

This approach keeps real estate agents at the front of a dynamic norm by showcasing their sustainability savvy and still acknowledges that sustainability matters, even in a low-scoring home. This approach should be directed specifically at real estate agents who are trying to sell a home with a low Home Energy Score, so as not to be confused with HERD's premise (and key message) that individual behaviors alone are not enough to reduce greenhouse gas emissions from the residential sector.

Homeowners and Privacy Concerns

When a home receives a Home Energy Score assessment, the assessor typically shares the Home Energy Score and report on the Green Building Registry (GBR) database. The GBR is how many real estate agents currently access and download Home Energy Score reports for inclusion in a home's public real estate listings.

While HERD's key messaging does not explicitly address confidentiality, residents expressed concerns about making their home's energy data public on the GBR. It is possible for Home Energy Score Partners — the energy professionals who promote the Home Energy Score and oversee a local program's mentorship and quality control — to determine data privacy. Homeowners can ask their assessor to keep their score private; examples of private scores appear in Green Building Registry entries for most Home Energy Scores in Columbia, Missouri and Fort Collins, Colorado.



A representative from the Green Building Registry noted that private scores function best when a program is voluntary, but detract from the goals of mandatory disclosure policies:

From the Green Building Registry

"We've found that when HES is adopted as a policy (mandate) then the HES score is publicly available. The reasons for the policy vary — it may be to provide greater consumer protections, greater transparency, cost of ownership, health & wellness information, or to provide data to identify areas of improvement for incentive/rebate programs and/or to support climate action plan initiatives" (Garabrant 2022).

Most municipalities with mandatory energy rating disclosure programs do not focus on the DBR or data privacy in their public-facing materials, but the OSI should be prepared to discuss confidentiality options in public webinars and events.

Messaging for Financing

A key message for HERD's home seller and real estate audiences is that home sellers do not have to achieve a certain score or make improvements before selling. This messaging combats potential misinformation, but can also detract from potential impact.

To encourage homeowners to undertake optional energy improvements, and to motivate buyers to purchase energy-efficient homes (or improve the score of less-efficient purchases), HERD messaging should clearly communicate financial opportunities that make energy efficiency cost-effective and appealing for different audiences.

- For homeowners: Energy efficiency financing is available from nonprofit green bank <u>Michigan Saves</u>. <u>DSIRE</u>, the Database of State Incentives for Renewables & Efficiency, is a state-by-state searchable resource for rebates.
- For home buyers: Several mortgage and lending products are linked to the Home Energy Score, including the FHA'S Energy Efficient Homes (EEH) "stretch ratio" policy, Freddie Mac's Greenchoice Mortgages®, and Fannie Mae's HomeStyle Energy Mortgage.



Launch Concerns

Homeowners were concerned about HERD's timing and rollout. Homeowners are cautious about introducing a new cost to residents when there is already a perception that the City is asking for more money through taxes and upcoming millages. Homeowners were also concerned that launching HERD too quickly could result in procedural confusion and frustration, that unexpected mailers advertising free Home Energy Scores would generate fear of scams or government surveillance, and that different OSI initiatives would compete for audience attention. In contrast, interviewees said that the <u>A2ZERO Solarize program</u> was an example of an excellent rollout with clear instructions and calls to action, and timely follow-up.

These concerns emphasize the need to establish visibility and credibility early and to develop robust instructions on the "how" of HERD alongside messaging on the "why."

Representatives from Walker-Miller and GreenHome Institute expressed concern that launching a mandatory program too quickly will flood the market with requests for urgent Home Energy Scores when the workforce does not exist yet. This concern is shared by real estate professionals in regions that are considering Home Energy Score policies (Roy et al. 2018), as a long wait for an assessment will delay a sale and frustrate residents. Workforce development is a key focus of HERD messaging to the building & industry professional audience, and another factor in favor of an initial voluntary program launch.



Target Audiences



Home sellers are the primary target group of most home energy disclosure ordinances. According to data compiled by AAABOR, close to 2,000 homes were sold annually in Ann Arbor in 2019 and 2020; City Assessor data reveals that most homes in Ann Arbor are sold after approximately 10 years of ownership.

What are we asking this audience? We ask home sellers to comply with the HERD ordinance by obtaining and listing their Home Energy Score. (Compliance enforcement is determined by City Council and typically targets the home seller). We ask for their support of HERD within the larger community and with their real estate team. Outside of active sellers, we ask all homeowners to consider scoring homes not yet on the market.

What is our access to this audience? A2ZERO Ambassadors, approximately 50 of whom are homeowners who would be affected by HERD; HOAs and neighborhood associations, which are listed (with contact information) on the Planning Department page of a2gov.org; affordable housing associations; Assessor's Office.

Real estate agents historically oppose home energy disclosure ordinances. This audience plays a key role in compliance and sharing information. In Ann Arbor, many real estate professionals are members of <u>AAABOR</u>, the <u>Ann Arbor Area Board of REALTORS®</u>.

What are we asking this audience? We ask for their crucial assistance in compliance with HERD by including the Home Energy Score and report in the MLS and all public listings. Real estate agents are a key source of information to their clients, so we ask that real estate agents attend city or energy partner trainings to gather accurate information about HERD.

What is our access to this audience? Some A2ZERO Ambassadors have connections with the real estate community through their own projects. The OSI has previously contacted agents, with a special focus on outreach to green-certified agents, and AAABOR.





This audience has potential to make a major impact, as many home improvements are done within the first years of moving into a home. Home buyers will help drive the market transformation for energy-efficient homes.

What are we asking this audience? We ask for their interest in home energy efficiency. We want home buyers to show their real estate agents that they care about energy use when searching for a home. We also went them to feel empowered to make improvements if they buy a home with a low score.

What is our access to this audience? Real estate agents; home inspectors, contractors and energy workforce; developers; city Assessor's Office, which can provide information on recent sales or property transfers.

Building professionals, including contractors, inspectors, and energy professionals, make up the workforce of trained private professionals are who qualified to become Home Energy Score assessors.

What are we asking this audience? We ask private companies and contractors to join the workforce to meet anticipated demand for Home Energy Scores and the expected subsequent improvements. We ask them to speak knowledgeably and favorably about the HERD ordinance, and to recommend a Home Energy Score when performing other services to relieve additional burden on home sellers.

What is our access to this audience? We have connections with Home Energy Score-certified firms Walker-Miller Energy Services, in Detroit, and the GreenHome Institute in Grand Rapids. Our website will provide step-by-step details for professionals interested in becoming Home Energy Score Assessors.

Building & Industry Professionals

Developers



Although they are also building professionals, our messaging to developers is slightly different. Developers sell directly to home buyers after building a new home. Although they are generally already more energyefficient, new homes will need to receive a Home Energy Score in compliance with the HERD ordinance.

What are we asking this audience? We ask developers to comply with the HERD ordinance by scoring all new and pre-constructed homes before listing them for sale.

What is our access to this audience? Traditional networking through direct research and outreach strategies to development companies completing work in Ann Arbor.



Key Messaging

Below are examples of key messaging developed by the Department of Energy, and messaging adapted for HERD. Plug-and-play, research-informed messages can be reworded for different communications tools.

DOE's Home Energy Score Messaging

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Offering the Home Energy Score is -

- FAST. Takes less than one hour in most homes.
- AFFORDABLE. Free Scoring Tool and training to keep costs low.
- SIMPLE. Easy to understand 1-to-10 scale.
- CREDIBLE. Created through robust testing and analysis.
- FLEXIBLE. Available through a variety of software and programs.
- From U.S. DOE Better Buildings, "Home Energy Score: A Game Changer for Labeling & Disclosure"

Improved Housing Stock

- Gather pre- and post-upgrade data to measure overall impacts
- Fix market failure by giving real estate professionals actionable energy information to appraise home value and provide financing
- Help residents achieve better quality of life associated with more efficient homes
- Put more money in the pockets of residents as they save on energy costs

From U.S. DOE Better Buildings, "Home Energy Score: A Game Changer for Labeling & Disclosure"

As a DOE Partner, Offering the Score is

- Fast. Assessments can be completed in less than an hour in most homes. If completed in conjunction with another in-home assessment, adding the Score can require as little as fifteen additional minutes.
- Affordable. Online training and access to the Scoring Tool are available at no cost.
- Simple. The Home Energy Score can be integrated with other software tools through an application-programming interface (API).
- Credible. DOE supports robust training, testing, and quality assurance to ensure a high quality product.
- Flexible. Assessors can customize the Score's recommendations and accompanying educational materials according to local preferences.

From U.S. DOE Better Buildings, "Add Efficiency Services to Your Members' Portfolios with Home Energy Score"

Ann Arbor's HERD Messaging



A home energy rating makes understanding and comparing home energy use easy, like a miles-per-charge rating for electric vehicles.

Communities across the United States are adopting home energy rating disclosures.

The Department of Energy's Home Energy Score is a simple 1-10 score, with 10 representing the most efficient homes. It suggests improvements that can increase your score, decrease your utility bills, and help your home sell faster.

We are here to help. Access tips, research, and lists of assessors on our website.



Residential energy use accounts for 23% of Ann Arbor's greenhouse gas emissions (A2ZERO Fact Sheet).

Voluntary efforts to reduce energy consumption in homes make a difference, but we cannot achieve our Carbon Neutrality Plan goals without accelerating energy efficiency in our homes.

Out of 130 homes evaluated in West Michigan that made improvements, average Home Energy Scores increased from 3 to 5 and saved an estimated 10,000 pounds of carbon dioxide (Little 2022).



families struggled to pay energy bills, and nearly a fifth reported forgoing or reducing necessities (like food or medicine) to pay their energy bills. Low-income residents face higher energy burdens and have potential to benefit from transparency around energy performance.

Energy burdens are high in the U.S. In 2015, nearly a third of U.S.

Equity

Beyond lower energy bills, energy-efficient homes also tend to have better indoor air quality, leading to healthier lives.

Research in Chicago showed that homes disclosing energy information — even when energy costs are high — sell faster than homes that do not (Elevate Energy 2015). Buyers appreciate the additional information when making such a large investment.

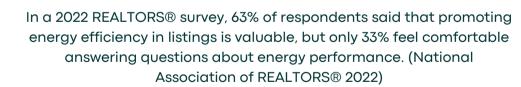
A low score only means a home uses more energy. This could be OK for buyers who value other aspects of the home, such as a large size or many windows.

A Home Energy Score assessment is fast, lasting about one hour. Prices are set by private assessors, but in areas with ordinances similar to HERD, they average between \$125-\$250, which is within reach for most sellers (Report to Portland City Council 2020).

Home sellers are not required to achieve a certain score or make improvements before selling.

In cities that have implemented policies similar to HERD, low scores have not delayed or killed sales.

There is significant unmet demand for energy efficiency. 71% of 10,000 surveyed homeowners think energy efficiency is important, but only 35% are satisfied with their home's energy use. (The Demand Institute 2013)



Real Estate Agents Market homes with high scores competitively, highlighting energy features that are otherwise invisible to buyers.

Build trust with buyers by providing apples-to-apples comparisons between different Home Energy Scores.

Remind buyers that they may use the Home Energy Score to qualify for certain loans or access financing for improvements after move-in.





Home Buyers

On average, home energy costs are higher than either property taxes or insurance for U.S. homes. HERD offers protection and transparency when making one of the biggest financial investments many people ever make. (U.S. Department of Energy, "Real Estate Professionals Factsheet")

Beyond lower energy bills, energy-efficient homes also tend to have better indoor air quality, leading to healthier lives.

Borrowers can use the Home Energy Score to qualify for mortgage products and energy financing. In some cases, the Home Energy Score can help borrowers qualify for larger loans.

Congratulations on your new home! Use the Home Energy Score and report to guide cost-effective improvements after you move in.

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Building & Industry Professionals Add a Home Energy Score certification to your existing qualifications. Professionals with prerequisite <u>credentials</u> are eligible to receive training to become Home Energy Score Assessors.

Becoming a Home Energy Score assessor is simple. Contact a local DOE Partner (Walker-Miller Energy Services, GreenHome Institute) for information about joining their program.

You may wish to include the Score as a bundled item within a standard audit or inspection, as a standalone product, or as a complimentary product to gain leads for home improvements.

In most homes, assessments can be completed in under an hour. If done in conjunction with another assessment, it may require just 15 additional minutes. TACTICS

Tactics

When choosing tactics to deliver a message, creativity is not necessarily the point; the point is to choose the method that achieves the goal and gets the most eyes on your message as possible.

Website

High-priority asset. Provide introduction to the Home Energy Score, the ordinance, and climate goals. Includes information and FAQ specific to home sellers, real estate agents, home buyers, and energy and building professionals. A QR code on all other materials will navigate back to the website.

Social Media

Determine the social media websites with the greatest impact. Prepare targeted posts on these sites, including Facebook and Nextdoor. Determine the audience and call to action for each post; be aware that they may attract comments and complaints.

Print & Digital Communications

This includes targeted mail campaigns as well as general fliers, fact sheets, and infographics. These will be distributed at events, placed on telephone poles, and available for download on the website.

News & Media

Prepare a press release for the launch of HERD, both as a voluntary program and in the event that the ordinance passes and becomes mandatory. Identify opportunities to publicize HERD at community events. Create a media relations brief.

Events & Engagement

This includes presentations, trainings, webinars, and lunch-and-learns for all audiences and audience groups, including AAABOR, A2ZERO Ambassadors, contractors, and HOAs. Regular events can include monthly speaker series, like these examples from the Portland, OR area ("<u>Selling Energy Efficient</u> <u>Homes</u>;" "<u>Selling Healthy Homes</u>.") Town events can include HERD-specific raffles or competitions.

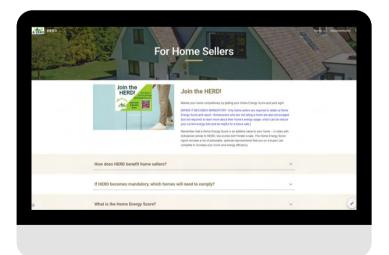
Website Development Representations

Information about HERD will live on A2gov.org. The images on this page are of a temporary mockup of the HERD website.

Key messaging was refined for multiple audiences in an FAQstyle format. All print materials will feature a QR code directing readers to the website.

The site will introduce HERD and the Home Energy Score, provide the "why" (rationale) in the form of energy and equity goals, provide credibility, address seller and real estate concerns, and outline procedure.

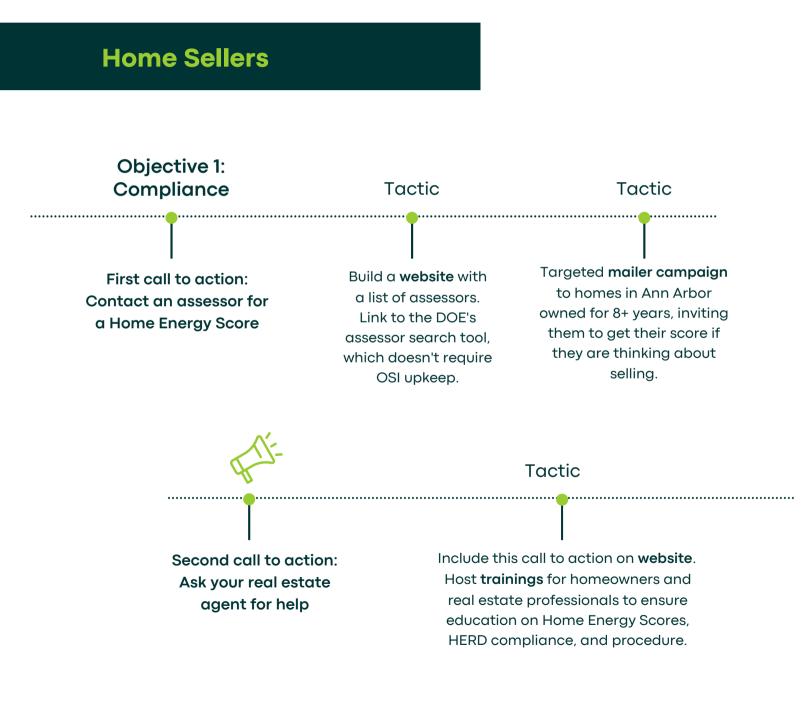


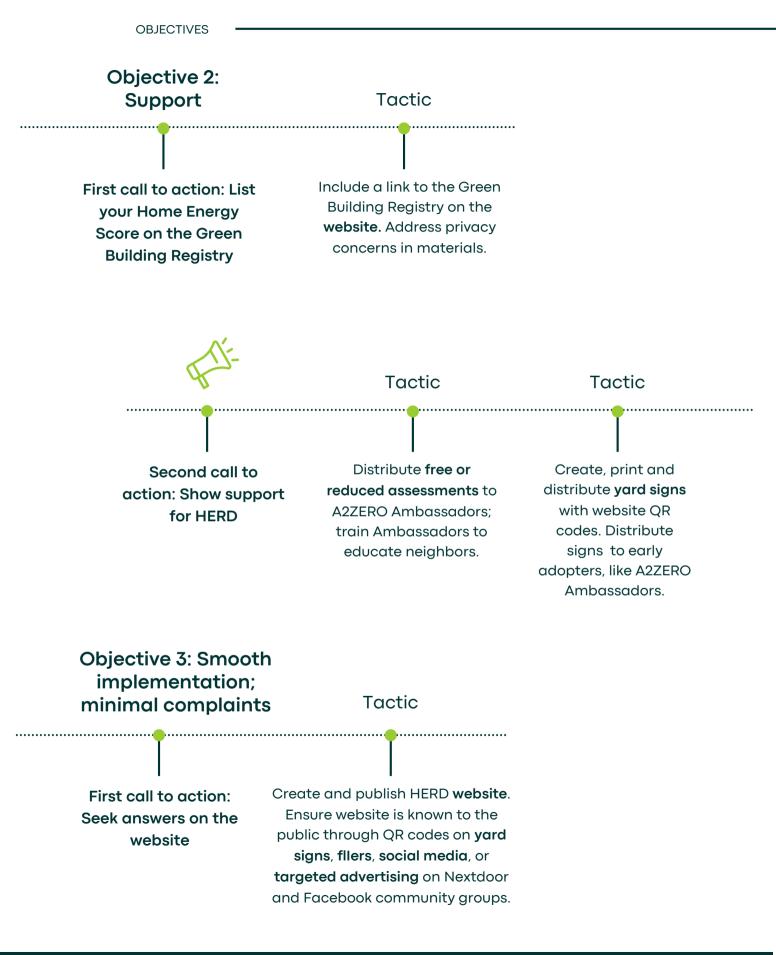


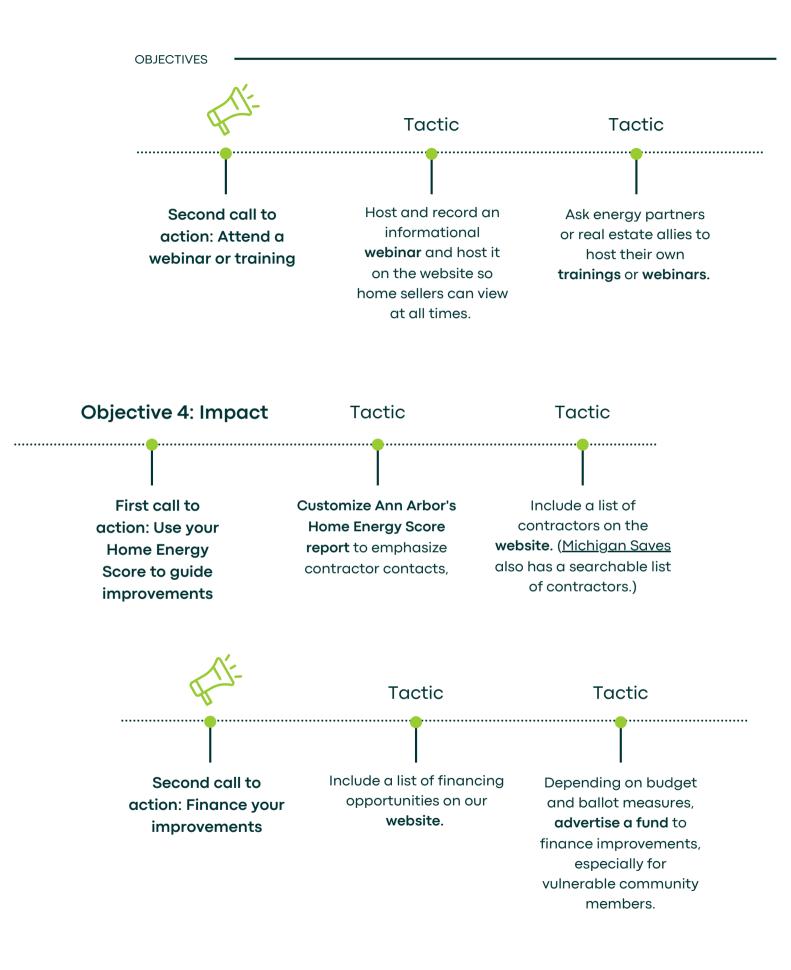
The website's messaging can be edited and updated as the program evolves from voluntary to mandatory.

Objectives

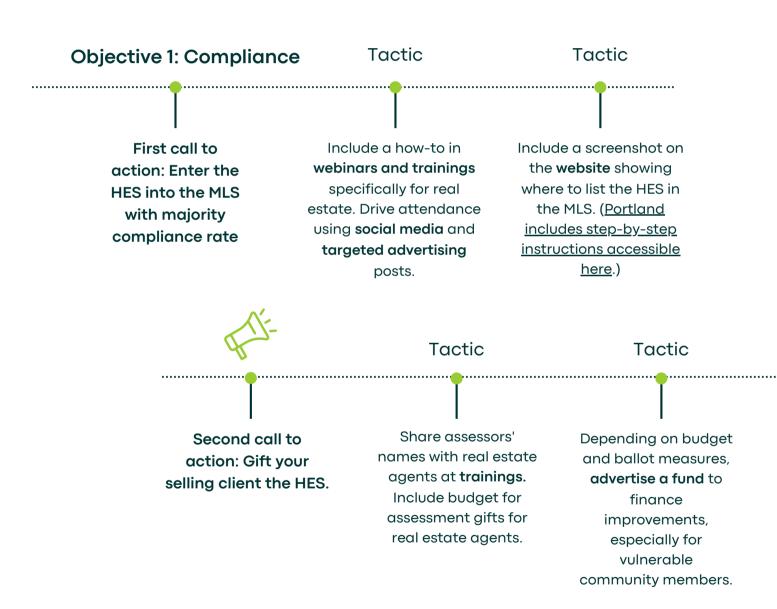
This section outlines chosen objectives for each target audience; calls to action for each objective; and tactics to amplify that call to action. Key messaging will be incorporated into these tactics. Objectives and tactics may change as the policy develops.

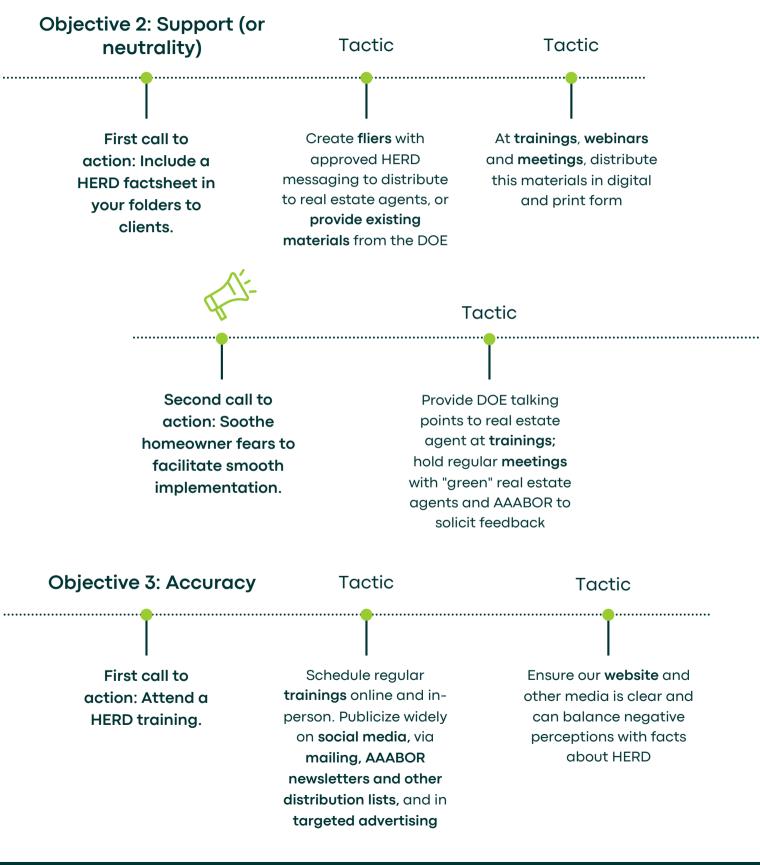






Real Estate Agents and AAABOR





Home Buyers

Objective 1: Interest

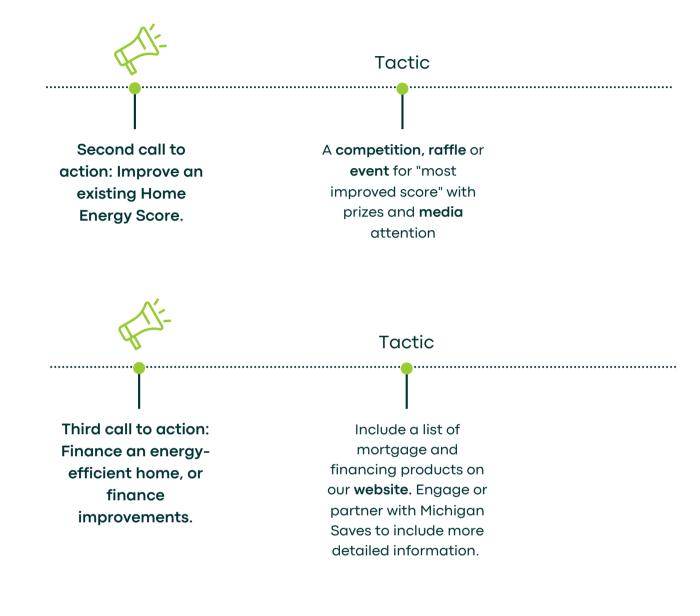
Tactic

.....

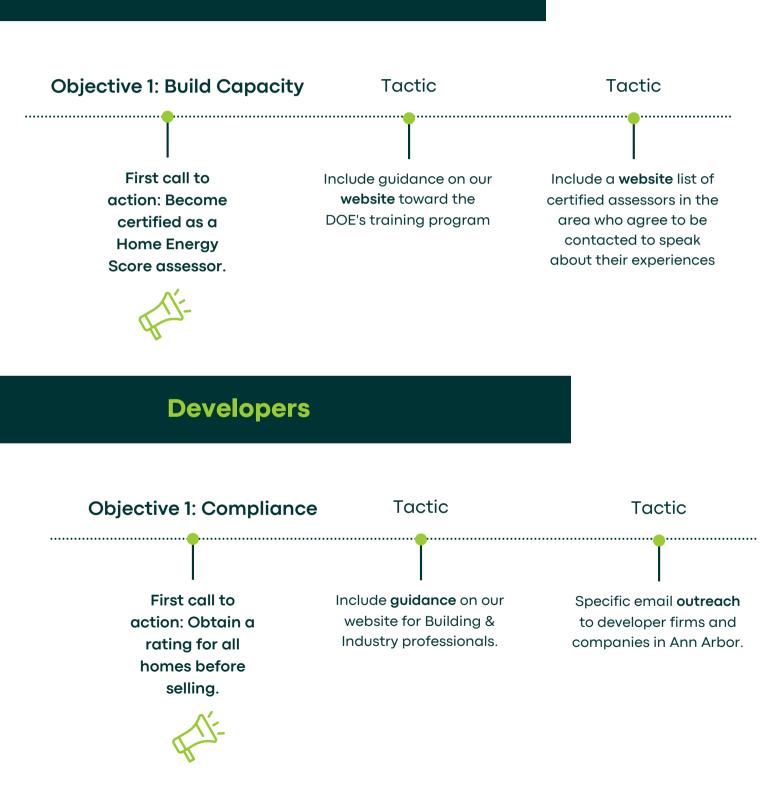
First call to action: Buyers, ask your real estate agent to share Home Energy Scores of potential homes.

Make HERD visible through **yard signs**, **targeted advertising**, **social media**, and possible **raffles** of Home Energy Scores





Building & Industry Professionals



Next Steps

Updates to key messaging, objectives, and tactics must occur after the text of the HERD ordinance is final.

Communicating HERD's Implementation

Once a policy is established, the "how to" messaging of HERD should set expectations and clarify procedures including:

- **Compliance enforcement and penalties:** Different tactics should communicate timelines for enforcement and the penalties for noncompliance. This is especially important if City Council follows Portland, Oregon's example and defers enforcement for the program's first year (Report to Portland City Council 2020).
- Exemptions and exceptions: Communicate if homes in foreclosure, condemned homes, homes under court order, or homes in other extenuating circumstances will be exempt from HERD. Clearly communicate if homeowners can apply for hardship or other exception applications.
- Incentives: Strategies for incentives are discussed in this document. If the OSI and City Council approve incentives, these must be communicated in various tactics. Sample text in the Appendix already includes reference to potential expiring incentives.
- Income thresholds for free or reduced assessments: A potential equity measure, this is discussed on the following page.
- **Disclosing a score:** Both the home seller and real estate audiences must understand how to disclose their score. Portland effectively <u>uses screenshots and a how-to manual</u> for real estate agents to see how to download and post a Home Energy Score in the MLS and all public listings. When collaborating with the real estate audience, the OSI should consider developing similar materials.

Getting the Home Energy Score: Which homes need it?



Equity and Accessibility in Communications

In order to communicate its equity intentions, HERD's policy design must be equitable. Policy development strategies should thus prioritize consulting with affordable housing associations, nonprofit organizations, and community leaders to gather their policy recommendations for the Energy Commission and City Council. During engagement, the OSI should also ask these audiences for their communications preferences, including what messaging is important to different communities, what follow-up is appropriate, and how and when they prefer to receive communication on HERD. Communications for HERD can consider equity in the following ways:

- Clearly communicating policy decisions that affect equity: For example, most municipalities requiring a Home Energy Score disclosure will pay for assessments for income-qualified homeowners. Once City Council has determined the threshold for income qualification, this must be clearly communicated in all materials.
- Language accessibility: Consider which languages are commonly spoken by Ann Arbor's homeowners and potential sellers and buyers. Municipalities can customize their Home Energy Score reports; Ann Arbor should explore options for reports in multiple languages as needed. If Ann Arbor decides to maintain a list of Home Energy Score assessors on the HERD website, consider clearly noting which assessors are multilingual.
- ADA compliance: Ensure all mailers, web and printed materials are ADA-compliant in terms of text color and follow best practices of alternative text for imagery. Video of testimonials or recordings of webinars should be equipped with closed captioning.
- Training and event support: Consider an approach that uses both online and in-person trainings to ensure that maximum residents, including elderly residents, residents with disabilities, and working families have multiple opportunities and methods to participate.

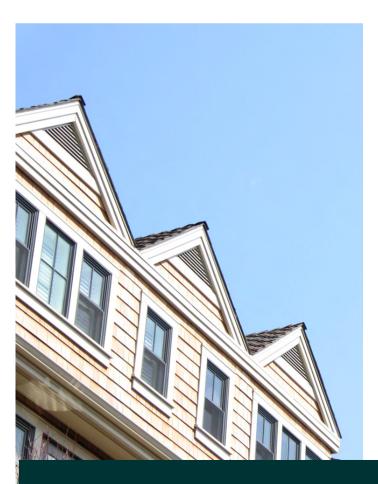
These considerations were informed by "<u>Equity in Communications and Marketing</u>," a blog by Ford Next Generation Learning.

Workforce Development

Building a strong workforce of certified Home Energy Score assessors is required for HERD's success, and communications regarding workforce development will evolve. The OSI should engage with current Home Energy Score Partners and current certified assessors to develop effective recruitment materials for future Home Energy Score assessors. This audience may also participate in future HERD trainings or Home Energy Score video walkthroughs. While HERD's website template simply links to the Department of Energy's "Find An Assessor" tool, future public-facing communications may benefit from a maintained list of regional Home Energy Score Assessors.

Compiling Testimonials

The strongest testimonials will come from within Ann Arbor. A2ZERO Ambassadors, or other homeowners who obtain a Home Energy Score (or better yet, make improvements), can be potential sources of HERD testimonials through video, media, or branded communications.



References

"A2ZERO Fact Sheet." n.d. The City of Ann Arbor.

https://www.a2gov.org/departments/sustainability/Documents/A2ZERO-Sector-FactSheet_Implementation.pdf.

Adomatis, Sandra. 2018. "Green Homes Sales Prices in Northern California: An appraiserled study that analyzes the price premium of green home features and explores barriers to mainstreaming green real estate." https://builditgreen.org/wpcontent/uploads/2017/12/BIG_Green_Home_Sales_Prices_Report_FINAL_2018.pdf.

Ann Arbor Area Board of REALTORS®. 2022. "Annual Report for Ann Arbor Area Board of REALTORS® 2021.

Ann Arbor Area Board of REALTORS®. "Monthly Housing Statistics, December 2020." Press release, January 13, 2021.

"Ann Arbor's Living Carbon Neutrality Plan." 2020. The City of Ann Arbor. https://www.a2gov.org/departments/sustainability/Documents/A2Zero%2 OClimate%20Action%20Plan%20_3.0.pdf.

Billingsley, Megan. 2012. "Effective Incentive Structures." Better Buildings. https://www.energy.gov/sites/prod/files/2014/01/f6/f2-billingsley.pdf.

Brookstein, Pamela, and Sandra K. Adomatis. 2020. "Realizing the Value: An Appraiser-Led Analysis of the High-Performing Home Premium in Leading Midwest Markets." Elevate Energy.

Cadena, Anjelita, and Thomas A. Thomson. 2015. "An Empirical Assessment of the Value of Green in Residential Real Estate." The Appraisal Journal Winter 2015:32-40. http://faculty.business.utsa.edu/tthomson/papers/TAJ_WI15_Feat2-EmpiricalAssessmentGreen.pdf.

CBS Detroit. 2012. "Realtors Tout State-Backed Home Energy Assessments." October 2, 2012. https://detroit.cbslocal.com/2012/10/02/realtors-tout-state-backed-home-energy-assessments/.

City and County of Denver and Lotus Engineering & Sustainability. 2019. "Home Energy Score Pilot Evaluation Report."

https://www.denvergov.org/content/dam/denvergov/Portals/771/documents/EQ/H ome%20Energy%20Score/DenverHomeEnergyScore_EvaluationReport_FINAL.pdf.

"City of Portland Home Energy Score." n.d. City of Portland. Accessed July 19, 2022. https://www.pdxhes.com/.

"Courses." n.d. National Association of REALTORS®.

https://www.nar.realtor/education/courses.

- The Demand Institute. 2013. "The Housing Satisfaction Gap: What People Want, but Don't Have." Climate Access. https://climateaccess.org/system/files/top-10-housingdesires.pdf.
- Douglas-Gabriel, Danielle. 2018. "Home energy audit: The best money I've ever spent." The Washington Post, February 2, 2018. http://washingtonpost.com/realestate/home-energy-audit-the-best-

money-ive-ever-spent/2018/02/01/06643628-fbac-11e7-ad8c-

ecbb62019393_story.html.

- DSIRE: Database of State Incentives for Renewables & Efficiency®. https://www.dsireusa.org/.
- "ECAD for Residential Homes." n.d. Austin Energy | ECAD Ordinance. https://austinenergy.com/ae/energy-efficiency/ecad-ordinance/ecad-forresidential-customers/ecad-for-residential-customers.
- Elevate Energy. 2015. "Energy Cost Disclosure in Chicago Residential Listings: Eighteen Months Out." Midwest Real Estate Data (MRED). http://www.mredllc.com/comms/resources/ECD_Analysis_YEAR2.pdf.
- Elevate Energy, Deborah Philbrick, Rachel Scheu, and John Blaser. 2016. "Moving the Market: Energy Cost Disclosure in Residential Real Estate Listings." ACEEE Summer Study on Energy Efficiency in Buildings, September 27, 2016. https://www.elevatenp.org/publications/moving-market-energy-costdisclosure-residential-real-estate-listings/.

"Energy Disclosure." n.d. Minneapolis, MN | Center for Energy and Environment. https://www.mncee.org/energy-disclosure.

"Energy Efficiency at Home." n.d. The City of Ann Arbor.

https://www.a2gov.org/departments/sustainability/Sustainability-Me/Families-Individuals/Pages/The-Green-House-Sustainability-at-Home.aspx.

- Esajian, JD. n.d. "A Guide To Sustainable Real Estate Development." FortuneBuilders. https://www.fortunebuilders.com/sustainable-real-estate-development/.
- Fannie Mae. 2018. "HomeStyle Energy Mortgage." Fannie Mae Real Estate Professional Fact Sheet. https://singlefamily.fanniemae.com/media/5016/display.
- Freddie Mac Single-Family Team. 2021. "Going Green: Home Energy Assessments 101." Freddie Mac Single-Family. https://sf.freddiemac.com/articles/insights/goinggreen-home-energy-assessments-101.

Garabrant, Meg. Email to Jess Silber-Byrne. July 11, 2022.

- Glickman, Joan. 2016. "DOE's Home Energy Score and FHA Mortgages: New Tools to Help You Shop for and Buy an Energy Efficient House | Better Buildings Initiative." Better Buildings Initiative. https://betterbuildingssolutioncenter.energy.gov/beatblog/doe%E2%80%99s-home-energy-score-and-fha-mortgages-new-tools-helpyou-shop-and-buy-energy-efficient.
- Goldstein, Benjamin, Dimitrios Gounaridis, and Joshua P. Newell. 2020. "The carbon footprint of household energy use in the United States." PNAS 117, no. 32 (July): 19122-19130. https://www.pnas.org/doi/10.1073/pnas.1922205117.
- Griffin, Anna, Ben Kaufman, and Sterling Hamilton. May 29, 2009. "Certified Home Performance: Assessing the Market Impacts of Third Party Certification on Residential Properties." https://www.yumpu.com/en/document/read/ 37565395/download-pdf-246-kb-earth-advantage
- Halpert, Julie. 2019. "Green Backlash: Talk of mandatory energy audits has Realtors seeing red." Ann Arbor Observer, May 3, 2019. https://annarborobserver.com/green-backlash/.

- Hardy, Lindsey. 2019. "Common misconceptions about the Home Energy Score." The Environmental Center. https://envirocenter.org/why-does-the-home-energyscore-matter/.
- Hill, Alex J., Jean-Philippe Boutin, Francois Boulanger, Richard Faesy, and John Dalton.
 2016. "Predicting Home Energy Rating and Disclosure Program Impacts for North American Jurisdictions." 2016 ACEEE Summer Study on Energy Efficiency in Buildings.

https://www.aceee.org/files/proceedings/2016/data/papers/7_218.pdf.

- "Home Energy Score | Energize Connecticut." n.d. Energize CT. https://www.energizect.com/realtors/home-energy-score.
- "Home Heroes," An infographic created by NEEF and Rocky Mountain Institute (RMI) for real estate agents to promote the value that buyers and sellers want through home energy performance. n.d.

https://www.neefusa.org/sites/default/files/assets/infographics/INFO17-HomeHeroes-RMI-2550x4184.png.

- "HUD FHA Insured Energy Efficient Mortgages | HUD.gov / U.S. Department of Housing and Urban Development." n.d. HUD. Accessed July 31, 2022. https://www.hud.gov/program_offices/housing/sfh/eem/energy-r.
- Institute for Market Transformation. 2015. "Greening the MLS: Bringing High-Performance Homes to Light in the District of Columbia." Institute for Market Transformation. https://www.imt.org/wp-content/uploads/2018/02/IMT_GreeningtheMLS_FINAL.pdf.

Little, Brett. Email to Jess Silber-Byrne. July 20, 2022.

Loschelder, David D., Henrik Siepelmeyer, Daniel Fischer, and Julian A. Rubel. 2019.

"Dynamic norms drive sustainable consumption: Norm-based nudging

helps café customers to avoid disposable to-go-cups." Journal of

Economic Psychology 75, no. Part A (December).

https://www.sciencedirect.com/science/article/pii/S0167487018303155.

Michigan Saves | Clean Energy Financing | Nonprofit Green Bank. https://michigansaves.org/.

- Miller, Douglas. 2017. "Sold! Why Understanding Home Energy Performance Will Become a Key to Real Estate Success." RMI. https://rmi.org/sold-understanding-homeenergy-performance-will-become-key-real-estate-success/.
- Model Systems Knowledge Translation Center. n.d. Developing Key Messages for Effective Communication.

https://msktc.org/sites/default/files/Key_Message_Development_508.pdf.

- Myers, Erica, Steven Puller, and Jeremy West. October 2019. "Effects of Mandatory Energy Efficiency Disclosure in Housing Markets." E2e Working Paper 044. https://e2e.uchicago.edu/pdf/workingpapers/WP044.pdf.
- National Association of REALTORS®. 2022. "REALTORS® & Sustainability Report -Residential." National Association of REALTORS®. https://cdn.nar.realtor/sites/default/files/documents/2022-realtors-andsustainability-report-04-26-2022_0.pdf.
- National Association of State Energy Officials. May 2020. "The Value of Adding Home Energy Score to Low-Income Energy Efficiency Programs." 24. https://naseo.org/data/sites/1/documents/publications/HES%20for%20L Mlv9.pdf.
- "On-Demand Training." n.d. Earth Advantage.

https://www.earthadvantage.org/initiatives/on-demand-training.html.

- Palacios, Ameerah. n.d. "Equity in Communications & Marketing." Ford NGL. https://www.fordngl.com/media-center/blog/equity-in-communicationsmarketing.
- "Real Estate Professionals City of Portland Home Energy Score." n.d. City of Portland Home Energy Score. Accessed July 29, 2022. https://www.pdxhes.com/real-estate-professionals.
- Redfin. n.d. "Portland Housing Market: House Prices & Trends." Redfin. Accessed July 25, 2022. https://www.redfin.com/city/30772/OR/Portland/housing-market.

- Report to Portland City Council on Residential Energy Performance Rating and Disclosure (Ordinance No. 188143). October 2020. Portland, OR: n.p. portland.gov/pdxhes/home-energy-score-program-documents.
- RMI (formerly Rocky Mountain Institute) and Earth Advantage. September 25, 2019. "Home Energy Labeling Program Workshop #3: Realtors Part 1," a PowerPoint presentation for participants in the Rocky Mountain Institute's Basecamp for home energy disclosure policies.
- RMI (formerly Rocky Mountain Institute) and Earth Advantage. October 24, 2019. "Home Energy Labeling Program Workshop #4: Realtors Part 2," a PowerPoint presentation for participants in the Rocky Mountain Institute's Basecamp for home energy disclosure policies.
- Roy, Anthony, Andria Jacob, Billi Romain, and Catherine Campbell-Orrock. 2018. "Learning the Score: Lessons from Developing and Deploying the Nation's First Mandatory Home Energy Score Policies." 2018 ACEEE Summer Study on Energy Efficiency in Buildings.
 - https://d1o0i0v5q5lp8h.cloudfront.net/earadv/live/assets/documents/Publications/ 0194_0286_000510.pdf.
- "Solar in Ann Arbor." n.d. The City of Ann Arbor | Sustainability & Me For Families & Individuals. Accessed July 29, 2022. https://www.a2gov.org/departments/sustainability/Sustainability-Me/Families-Individuals/Pages/Ann-Arbor-Solarize.aspx.
- Sussman, Reuven, Christine Kormos, Celine Park, and Emma Cooper. 2020. "Energy Efficiency in Real Estate Listings: A Controlled Experiment." ACEEE Research Report August 2020 (August). https://www.aceee.org/researchreport/b2002.
- U.S. Department of Energy. n.d. "Add Efficiency Services to Your Members' Portfolios with Home Energy Score." Better Buildings. https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/ Home%20Energy%20Score%20for%20Trade%20Associations.pdf.

- U.S. Department of Energy. n.d. "Assessor Tips." Better Buildings. https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/ AssessorTips_Final.pdf.
- U.S. Department of Energy. n.d. "Designing Incentives Toolkit." Better Buildings. https://www.energy.gov/sites/default/files/2015/04/f21/BBRN_Designing-Incentives-Toolkit.pdf.
- U.S. Department of Energy. n.d. "Financing Products and Home Energy Score." Better Buildings. https://betterbuildingssolutioncenter.energy.gov/homeenergy-score/financing-products.
- U.S. Department of Energy. n.d. "Financing Products Linked to Home Energy Score." Better Buildings.

https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/ Home%20Energy%20Score%20Financing_0.pdf

- U.S. Department of Energy. n.d. "Home Energy Score: A Game Changer for Labeling and Disclosure." Better Buildings. https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/ Home%20Energy%20Score%20for%20State%20and%20Local%20Governments_0. pdf
- U.S. Department of Energy. n.d. "Home Energy Score Educational Module Insert for REALTOR Trainings." Better Buildings. https://betterbuildingssolutioncenter.energy.gov/sites/default/files/Home%20Ener gy%20Score%20Educational%20Module%20061217.pdf
- U.S. Department of Energy. n.d. "Home Energy Score for Real Estate." Better Buildings. https://betterbuildingssolutioncenter.energy.gov/home-energy-score/homeenergy-score-real-estate
- U.S. Department of Energy. n.d. "Provide Quality Assurance for Home Energy Score | Better Buildings Initiative." Better Buildings Initiative. https://betterbuildingssolutioncenter.energy.gov/home-energy-score/providequality-assurance.

- U.S. Department of Energy. n.d. "Real Estate Professionals Factsheet." Better Buildings. https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/R eal%20Estate%20Professionals%20Factsheet%20052517.pdf
- U.S. Department of Energy. n.d. "Real Estate Transactions Talking Points." Better Buildings.

https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attachments/R eal%20Estate%20Agent%20Talking%20Points.pdf

- U.S. Department of Energy. n.d. "What Does My Score Mean?" Better Buildings. https://betterbuildingssolutioncenter.energy.gov/sites/default/files/attac hments/What%20Does%20My%20Score%20Mean%20Fact%20Sheet.pdf.
- U.S. Energy Information Administration. 2018. "One in three U.S. households faces a challenge in meeting energy needs." TODAY IN ENERGY. https://www.eia.gov/todayinenergy/detail.php?id=37072.
- U.S. Environmental Protection Agency. 2022. "Sources of Greenhouse Gas Emissions | US EPA." Greenhouse Gas Emissions. https://www.epa.gov/ghgemissions/sourcesgreenhouse-gas-emissions.
- "Voluntary Home Energy Score Services | Eugene, OR Website." n.d. Eugene, Oregon. https://www.eugene-or.gov/4714/Home-Energy-Score-Program.
- Wilson, Jonathan, David Jacobs, Amanda Reddy, Ellen Tohn, Jonathan Cohen, and Ely Jacobsohn. December 2016. "Home RX: The Health Benefits of Home Performance." Energy Efficiency & Renewable Energy, v, 6, 10. energy.gov/eere/buildings.
- Yale Climate Connections. 2022. "Living in energy-efficient homes can improve people's health." April 21, 2022. https://yaleclimateconnections.org/2022/04/living-inenergy-efficient-homes-can-improve-peoples-health/.

Appendix

The following pages of this communications strategy include materials created as assets for HERD. These materials can be modified as needed in the future.





Postcard to new homeowners

This audience is likely to make home improvements soon after moving in. Text in blue indicates a possible incentive.



Decrease your energy bills, increase your home's comfort

Ann Arbor's home energy rating disclosure (HERD) program makes home energy as understandable as reading an electric vehicle's miles-percharge rating.

Learn more about your home's energy efficiency by scheduling a Home Energy Score assessment.

For a limited time, HERD Home Energy Score assessments are free or reduced for eligible residents. Visit our website to learn how you can schedule your assessment.

SCAN THE CODE ON THE FRONT OF THIS CARD TO LEARN MORE AND GET YOUR SCORE SUSTAINABILITY@A2GOV.ORG



Postcard to homeowners of 8+ years

The OSI found that most homeowners in Ann Arbor sell after about 10 years. Property transfer lists from the City Assessor can identify this audience. Text in blue indicates a possible incentive.



A Home Energy Score can help you sell faster.

Research shows that homes disclosing energy information sell faster. Ann Arbor's Home Energy Rating Disclosure (HERD) aims to help buyers and sellers understand a home's energy efficiency.

For a limited time, Home Energy Score assessments are free or reduced for eligible residents. Visit our website to learn how you can schedule your assessment.

SCAN THE CODE ON THE FRONT OF THIS CARD TO LEARN MORE AND GET YOUR SCORE SUSTAINABILITY@A2GOV.ORG



Yard signs

Two possible yard sign designs for A2ZERO Ambassadors or community members.



sustainability@a2gov.org

Public flier (mandatory)

This flier shows the simplest key messaging introducing HERD, while the large QR code guides readers to the website for full information. The City seal accompanies the HERD logo to build trust.



Ann Arbor's home energy rating disclosure (HERD) program makes understanding home energy simple, like reading the miles-percharge rating on an electric vehicle.

HERD uses the U.S. Department of Energy's **Home Energy Score**, which rates homes on a 1–10 scale. The score includes a report that suggests how home sellers or new homeowners can increase a score, decrease utility bills, and reduce home energy emissions.

Home sellers are required to share their Home Energy Score and report in all public listings for their home. Home sellers are <u>not</u> required to achieve a certain score or make improvements before selling their home.

How does HERD help?

- Studies show that homes disclosing energy data sell faster than homes that do not.
- Home buyers can compare energy data and costs.
- Ann Arbor progresses
 toward our equity and
 emissions reduction goals.

Learn more & get your score:



sustainability@a2gov.org

Public flier (voluntary)

An alternative public flier for a voluntary program. This flier does not have a QR code and can be shared at events before the website is complete.



Ann Arbor's voluntary home energy rating disclosure (HERD) program makes understanding home energy simple, like reading the miles-per-charge rating for an electric vehicle.

HERD uses the U.S. Department of Energy's **Home Energy Score**, which rates homes on a 1–10 scale. The score includes a report that suggests how home sellers or new homeowners can increase a score, decrease utility bills, and reduce home energy emissions.

Home sellers are encouraged to obtain a Home Energy Score and include it in all public listings for their home. Home buyers can use the Home Energy Score to access additional financing or guide improvements after move-in.

How does HERD help?

- Home Energy Scores provide a roadmap for energy improvements that can decrease energy use and increase savings.
- Studies show that homes disclosing energy data sell faster than homes that do not.
- Home buyers can compare apples-to-apples energy data and costs before making their purchase.
- Ann Arbor progresses toward our net-zero goals by improving the efficiency of our homes.

Learn more and get your score: sustainability@a2gov.org

Real estate one-pager

Messaging includes the HERD premise statement, information on procedure, and reflects the growing trend of energy disclosures.

A ² ZER	HERD for Real Estate What agents should know about Ann Arbor's <u>Home Energy Rating</u> Disclosure
0	 Sellers listing single-family homes, condos, duplexes, and townhomes must receive and share their Home Energy Score. The Home Energy Score, developed by the U.S. Department of Energy, is a simple 1-10 score, with a 10 representing the most efficient homes. It's similar to a miles-per-charge rating for an electric vehicle. Sellers are <u>not</u> required to achieve a certain score or make repairs.
Ŷ	 Ann Arbor joins a growing number of cities disclosing energy data. Studies show that disclosing energy data helps homes sell faster, even when energy costs are high. A low score only means a home uses more energy. This could be OK for buyers who value other home aspects, such as a large size or many windows.
F	 Energy efficiency is increasingly important to homeowners, buyers, and real estate professionals. Sellers are seeking agents who can competitively market their homes' energy and sustainability features. Buyers are seeking who can educate them on home energy costs, improvements, and financing.
	 Help your selling client by scheduling or gifting a Home Energy Score assessment. Use our website to access a list of assessors. (Assessors are private and set their own prices and schedules). An assessor visits the home and spends ~1 hour collecting data on age, size, HVAC systems and envelope. Publish the completed score and report on the MLS and in all listings.
Ð	 HERD will help homes sell faster, match buyers to the right home, and accelerate Ann Arbor's progress on our net-zero goals by motivating energy improvements. We are here to help. Use the QR code to the right to to access research and tips on our website, find an assessor, and get your score.

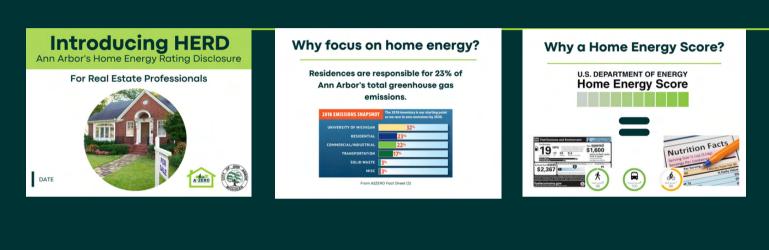
Home sellers one-pager

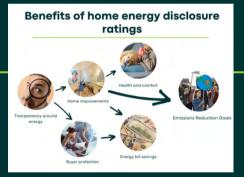
Includes HERD key messaging and information on procedure.



Real estate training slide deck

Snapshots of pages from a real estate training slide deck, accessible through a shared Google Drive as a Powerpoint.







Significant unmet demand

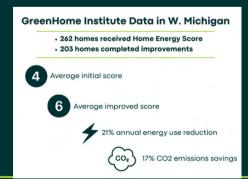
Findings from the Demand Institute, "The Housing Satisfaction Gap," 2013

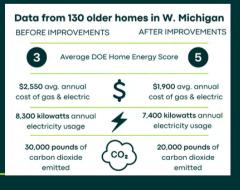


- 71% of those surveyed (10,000 homes) think energy efficiency is important.
 35% of those surveyed are satisfied with their home's energy use.
- Average household spending on home electricity has grown 56% since 2000.
- 90% of surveyed households have taken some measure in the past five
- years to consume less energy.

Graphic from the Demand Institute, "The Housing Satisfaction Gap"

Real estate professionals are the bridge between your clients and the energy information they want.





Press release draft (voluntary)

Sections in blue are pending.

Contact: Dr. Missy Stults, Sustainability and Innovations Director

Ann Arbor Introduces Home Energy Rating Disclosure Program, Invites Homeowners to Accelerate to Net Zero Goals

Ann Arbor joins cities around the United States using home energy ratings to help home sellers and buyers make decisions about energy efficiency

ANN ARBOR (DATE) - The City of Ann Arbor Office of Sustainability and Innovations announced today the launch of the Home Energy Rating Disclosure (HERD) program, an opt-in effort inviting homeowners to obtain a Home Energy Score and publish it in real estate listings.

The Home Energy Score, a widely-used labeling system developed by the Department of Energy, rates a home's energy efficiency on a scale from one to 10, reports estimated utility costs, and suggests energy upgrades.

The opt-in HERD program will accelerate the City's progress on its carbon neutrality goals by educating home owners and buyers about a home's energy use during a real estate transaction and motivating residents to make efficiency upgrades.

Quote: Quotes should not restate facts but recognize and provide thought leadership on the issue at hand. Quotes also offer an opportunity for a Mayor to congratulate the city on its progress and recognize leaders for their achievements in bettering the community.

Measurements of the City's greenhouse gas emissions in 2018 revealed that residential energy use accounts for 23% of total emissions. In June 2020, Ann Arbor officially adopted the A2ZERO Carbon Neutrality Plan to transition to community-wide carbon neutrality by 2030, which calls for "significantly improving the energy efficiency in our homes."

With 2,000 homes sold annually in Ann Arbor, HERD targets real estate transactions as a vital access point into understanding home energy use, and aims to make Home Energy Scores a reflexively-recognized component of any home purchase – similar to the miles-per-charge rating on an electric vehicle, or Nutrition Facts labeling on groceries. HERD's use of the Home Energy Score empowers homeowners to make informed decisions on home purchases through its apples-to-apples comparative approach. HERD's program website connects home buyers with mortgage and lending products associated with the Home Energy Score, and refers new homeowners to financing for optional energy efficiency improvements.

For a limited time, the City of Ann Arbor is offering free or reduced assessments to homeowners who become A2ZERO Ambassadors / attend a training / some other behavioral incentive. Contact NAME to become involved in this program.

To learn more about HERD and the Home Energy Score, the City has published information on its HERD program website, including a HERD for Home Sellers fact sheet and a HERD informational flier. The Office of Sustainability and Innovations will host HERD training and webinars for real estate agents who are eager to add home energy efficiency knowledge to their unique qualifications. Agents may express their interest in learning about upcoming trainings on the HERD program website.

Ann Arbor joins cities and states around the U.S. in adopting a voluntary home energy rating disclosure program, and will be the first municipality in Michigan to encourage citywide use of the Home Energy Score. Ann Arbor's Home Energy Rating Disclosure (HERD) has the potential to remove thousands of pounds of annual greenhouse gas emissions through its innovative, market-transformation approach, while simultaneously protecting home buyers from unexpectedly high utility costs in their new homes. With HERD, the Ann Arbor Office of Sustainability and Innovations launches another cutting-edge program that places Ann Arbor at the forefront of Michigan's climate progress.

Press release draft (mandatory)

Sections in blue are pending.

Contact: Dr. Missy Stults, Sustainability and Innovations Director

Ann Arbor City Council Passes Home Energy Rating Disclosure (HERD) Ordinance to Accelerate Carbon Neutrality, Reduce Residential Energy Burdens

Ann Arbor joins other U.S. cities on the forefront of climate action, is the first in Michigan to require energy labeling for most real estate transactions

Opening 1 - HERD passes Council vote:

ANN ARBOR (DATE) - In a unanimous vote on DATE, Ann Arbor City Council approved citywide implementation of Ann Arbor's Home Energy Rating Disclosure (HERD) program. Previously an opt-in program, the HERD ordinance requires most home sellers in Ann Arbor to obtain a Home Energy Score and publish it in real estate listings. Once signed into law by Mayor NAME, HERD will accelerate the City's progress on its carbon neutrality goals by educating home owners and buyers about a home's energy use during a real estate transaction and motivating residents to make efficiency upgrades.

Opening 2 - HERD signed into law by mayor:

ANN ARBOR (DATE) - Mayor NAME signed Ann Arbor's Home Energy Rating Disclosure (HERD) ordinance into law yesterday. By requiring most home sellers in Ann Arbor to obtain a Home Energy Score and publish it in real estate listings, HERD aims to educate homeowners and buyers about a home's energy use, motivate residents to make efficiency upgrades, and decrease the City's greenhouse gas emissions.

The ordinance covers all single-family homes, townhomes, duplexes, and condos within Ann Arbor city limits and will go into effect on DATE.

For use in either release:

Quote: Quotes should not restate facts but recognize and provide thought leadership on the issue at hand. Quotes also offer an opportunity for a Mayor to congratulate the city on its progress and recognize leaders for their achievements in bettering the community.

The Home Energy Score, a widely-used labeling system developed by the Department of Energy, rates a home's energy efficiency on a scale from one to 10, reports estimated utility costs, and suggests energy upgrades.

Measurements of the City's greenhouse gas emissions in 2018 revealed that residential energy use accounts for 23% of total emissions. In June 2020, Ann Arbor officially adopted the A2ZERO Carbon Neutrality Plan to transition to community-wide carbon neutrality by 2030, which calls for "significantly improving the energy efficiency in our homes."

With 2,000 homes sold annually in Ann Arbor, HERD targets real estate transactions as a vital entry point into understanding home energy use. HERD will make Home Energy Scores a reflexively-recognized component of any home purchase – similar to the miles-per-charge rating on an electric vehicle, or Nutrition Facts labeling on groceries.

In addition to taking a market-transformation approach to home energy, HERD's use of the Home Energy Score empowers homeowners to make informed decisions on home purchases through its apples-to-apples comparative approach. HERD's program website connects home buyers with mortgage and lending products associated with the Home Energy Score, and refers new homeowners to financing for optional energy efficiency improvements. For a limited time, the City of Ann Arbor is offering free or reduced assessments to homeowners who become A2ZERO Ambassadors / attend a training / some other behavioral incentive. Contact NAME to become involved in this program.

To learn more about HERD and the Home Energy Score, the City has published shareable information on the HERD website, including a HERD for Home Sellers fact sheet and a HERD informational flier. The Office of Sustainability and Innovations will host HERD training and webinars for real estate agents who are eager to add home energy efficiency knowledge to their unique qualifications. Agents may express their interest in learning about upcoming trainings on the HERD program website.

Ann Arbor joins forward-thinking cities across the United States in requiring home energy disclosures at the time of real estate listing. Ann Arbor will be the first city in Michigan to require disclosures, and the first in Michigan to adopt citywide use of the Home Energy Score. Ann Arbor's Home Energy Rating Disclosure (HERD) has the potential to remove thousands of pounds of annual greenhouse gas emissions through its innovative, market-transformation approach, while simultaneously protecting home buyers from unexpectedly high utility costs in their new homes.