Time-of-Sale Energy Disclosure Policies

KEY FINDINGS

This fact sheet reports the costs, benefits, and city experiences of designing and implementing time-of-sale energy disclosure policies for single-family homes. Cities can pursue this innovative policy at an affordable cost; however, we found that cities did not track outcomes such as energy efficiency incentive uptake, energy cost savings, and greenhouse gas emissions reductions stemming from the policy. Cities pursuing this policy should consider tracking outcomes via program evaluation processes to gauge program success.

The cities assessed used between 1.5 and 2.5 full-time equivalent (FTE) employees during the design phase of the policy. This number declined in the implementation period. Consulting and IT infrastructure costs were the highest expenses after FTEs in the design phase. Time-of-sale energy disclosure policies created 7.7 direct jobs per 100,000 residents in one city due to home energy assessment activity.

Time-of-sale energy disclosure policies require homeowners to disclose information about their home's energy consumption to potential buyers at the time of a sale or listing. Currently at least eight cities have adopted such an energy disclosure requirement. Cities vary in how much information must be disclosed. For example, some only stipulate that energy cost information be shared with potential buyers in the form of an energy bill, while others require the homeowner to conduct an energy assessment and disclose the report.

This fact sheet is part of *By the Numbers*, a series on the costs and benefits of local energy efficiency policies. Each jurisdiction that we studied as part of this series had a population of at least 100,000. We identified trends discussed in this fact sheet based on interviews with staff for two cities with time-of-sale disclosure policies that agreed to participate in our research. To view other entries in the series, please visit the *By the Numbers* web page.[1]

Costs of Time-of-Sale Energy Disclosure Policies

Cities reported comprehensive data on the design, implementation, and participant compliance costs (i.e., costs to building owners) of time-of-sale energy disclosure policies. Table 1 below presents these costs.

[1] For more information on our methodology and scope of research, please see the topic brief in the *By the Numbers* series.

Table 1. Costs of time-of-sale energy disclosure policies

	Design costs		Annual implementation costs		Participant costs
City	FTEs used	Other costs	FTEs used	Other costs	Financial expenses
City A	1.5	$90,000	1	$2,000+	Dependent on size of building; $110 per deferral**
City B	2.5	$27,700+	1*	$43,699+	$125 per assessment

***City's reported FTEs were insufficient to successfully implement the policy. **For the average-size single-family home, the cost of an assessment is about $300 plus a filing fee of $79. For an average commercial or multifamily building, the cost of an assessment is about $1,000 plus a filing fee of $152. Also note: We allowed cities to delineate design and implementation costs; however, formal adoption of the policy was a typical milestone marking the switch between the design phase and the implementation phase. Therefore, design costs can generally be read as one-time expenses occurring prior to formal adoption of the policy, while implementation costs can generally be read as annual, recurring costs, although in some instances one-time costs may exist during the implementation phase. Design phase costs are the total amount spent for the entirety of the design phase, which generally lasted one to two years.**

Overall, the cost of full-time equivalents (FTEs) was the most significant cost for cities during the life cycle of the policy. Cities used no more than 2.5 FTEs to design the policy.

Staff costs during the design phase represented the greatest expense for both cities. They had similar consulting costs during the design phase but a noticeable difference—a gap of 1 FTE—in the number of FTEs used to design the policy. This may have been because City B's population is larger than City A's. City B also hired consultants, which may have reduced its need for FTEs.

City A reported IT infrastructure costs of $60,000, with $40,000 spent on establishing an online payment system (and merging it with the city's other payment systems) and $20,000 on building out Salesforce to support the policy.

Both cities reported that 1 FTE was used to implement the policy, but City B could have used more FTEs to better track homes for sale. City A reported that it was able to reduce the FTEs used during implementation from 1.5 to 1 by automating some tasks, such as sending out emails on upcoming compliance deadlines in Salesforce; the automated emails reduced the staff time needed to implement the policy. As during the design phase, City B hired consultants with expertise in home energy efficiency services to implement the policy. The consultant fees covered the annual costs of IT infrastructure. Notably, this city does not pay for quality assurance; it is paid for via a $35 fee to the home seller after an assessment is performed. To lower costs, cities can explore a broad range of options, including conducting implementation in-house, sharing costs with the state government, or hiring consultants, and choose the most cost-effective option.

Further, City B provides free home energy assessments to income-eligible home sellers. The city has a $75,000 contract for incentives but has paid out only $26,000 over three years. City B also spent $3,700 on a consumer survey.

Both cities require energy assessments, which represent the majority of costs for participants in the policy. City A also charges a deferral fee for home sellers who defer the assessment to the home buyer.

Benefits of Time-of-Sale Energy Disclosure Policies

Reported data on the benefits of time-of-sale energy disclosure policies are lacking. For example, cities did not have data on reductions in GHG emissions and energy use associated with policy compliance. Table 2 lists the benefits of these policies as reported by the cities.

Table 2. Benefits of time-of-sale disclosure policies

City	Reporting period	Percentage of building stock required to comply	Number of interventions	Jobs created (per 100,000 residents)
City A	Seven years	100%*	About 1,800 energy assessments	—
City B	Three years	100%*	About 29,400 energy assessments	7.7 direct jobs

***Represents total proportion of single-family buildings that are subject to the policy when the building is listed or sold**

City A reported 1,800 energy assessments in the seven years since the policy took effect, and City B reported about 29,400 energy assessments over three years. Cities did not have data on whether a home seller or home buyer chose to pursue the suggested energy efficiency upgrades presented on the report. Cities stated that they did not have the evaluation processes in place to track GHG emissions reductions in participating buildings and highlighted this as a drawback of their programs. Cities may need more guidance on these processes.

While no city reported benefits such as energy use and GHG emissions reductions, time-of-sale energy disclosure policies have other benefits not mentioned. Cities considering adopting these policies can track metrics reflecting these other benefits, such as uptake of utility incentive programs. For example, an evaluation of one time-of-sale energy disclosure policy found that the policy led to an increase in energy efficiency investments of about 31% for home sellers and about 12% for home buyers (Myers, Puller, and West 2020). Further, time-of-sale energy disclosure policies benefit policymakers by equipping them with data on the local housing stock, home sellers by better valuing a home's energy efficiency features,

and home buyers by providing more information on a home's energy costs prior to purchase (ACEEE 2018).

Last, neither city reported the benefits of the policy specifically to low-income households and households of color.

Policy Design and Adoption Process[2]

KEY TASKS AND ACTIVITIES

City outreach to stakeholders and the real estate community was important when developing this policy. Creating a technical working group was an effective way to collect input on the specific requirements of the policy. In particular, the creation of an equity stakeholder group allowed one city to revise its policy in a way that would not burden marginalized groups. In response to feedback, cities tweaked the details of the policies as they were being developed. For policies that require the disclosure of an energy report or assessment, it was important to vet the different scoring tools that generate home energy reports and to decide on a standardized tool.

KEY STAKEHOLDERS

Nonprofit organizations: community-based organizations serving marginalized groups, building and energy policy nonprofits, housing rights organizations

Real estate and buildings community: real estate agents and brokers, appraisers, mortgage lenders and underwriters, home inspectors, homeowners, assessors

Energy service providers: energy and water utilities, home energy efficiency service companies

Government organizations: local and state energy commissions, state energy departments, U.S. Department of Energy

CHALLENGES

Securing buy-in from the real estate community was one of the greatest challenges, if not *the* greatest challenge, to passing a time-of-sale energy disclosure policy. For example, real estate agents worried that the assessment would lengthen the transaction process. In one city, the real estate industry argued against the policy by citing a potentially negative impact on low-income groups. However, the city's own outreach to those groups and the coalition it built in support of the policy ultimately led to successfully countering those arguments.

[2] Information included in this section and in the Policy Implementation section that follows is specific to time-of-sale disclosure policies. It should be considered along with the general trends identified in the topic brief that accompanies this fact sheet.

Policy Implementation

KEY TASKS AND ACTIVITIES

Key tasks and activities associated with time-of-sale energy disclosure policies include compliance and enforcement; education of real estate agents and brokers, appraisers, mortgage lenders and underwriters, home inspectors, homeowners, and assessors; quality assurance; coordinating policy tasks across entities; and coordinating with the regional Multiple Listing Service (MLS), the central database of the real estate industry. Further, one city continually thinks about new ways to offer a direct connection between home energy reports and energy efficiency service providers, which requires developing partnerships with providers.

Lessons Learned for Design and Implementation

Don't underestimate staff time needed for compliance. Cities found that it was essential to reserve enough budgeting and staff time for successful implementation of a time-of-sale policy. These policies proved difficult to enforce due to the vast number of individuals involved; city staff spent a significant amount of time tracking and engaging home sellers.

Engage low-income homeowners and homeowners from marginalized communities. As mentioned previously, engagement with these groups helped one city understand how the policy would impact them. When faced with criticisms from the real estate community that the policy would harm low-income homeowners, the city's prior engagement allowed them to counter these arguments. This instilled a sense of confidence in the city council that the policy would not lead to negative outcomes for low-income and marginalized groups.

Connect with your local MLS. Cities considering a time-of-sale disclosure policy should prioritize advance planning and coordination with their region's MLS. Cities may have more success connecting with the MLS after formal adoption of a policy, as better coordination with and participation from the MLS can allow cities to identify homes that are (and are not) disclosing energy information. Consequently, this may reduce the staff time spent on compliance and enforcement.

Equity in Design and Implementation

Both cities provided compliance pathways to low-income homeowners. One subsidized the cost of the energy assessment, while the other opted to provided deferrals for homeowners who could not afford to comply. One potential method to equitably implement a time-of-sale energy disclosure policy is to charge noncompliance fines as a percentage of the listing price and use the fees generated to subsidize compliance costs for low-income homeowners.

As noted above, one city convened an equity stakeholder group, which consisted of nonprofits providing low-income weatherization services as well as organizations representing communities of color, renter groups, and other constituencies. When this

stakeholder group objected to a provision in the original policy that would have required home energy disclosure for properties being rented—arguing that the cost of the assessment would ultimately lead to higher rents—the city removed that provision. The other city is working to create an apprenticeship program to support its time-of-sale disclosure policy.

References

ACEEE. 2018. *Home Energy Efficiency Policies: Ratings, Assessments, Labels, and Disclosure*. Washington, DC: ACEEE. www.aceee.org/sites/default/files/pdf/topic-home-energy-assessment.pdf.

Myers, E., S. Puller, and J. West. 2020. "Mandatory Energy Efficiency Disclosure in Housing Markets." *VoxEU*, November 15. voxeu.org/article/mandatory-energy-efficiency-disclosure-housing-markets.

Appendix A. Detailed Cost Tables

Table A1 lists detailed, itemized costs for time-of-sale energy disclosure policies. Implementations costs are reported on an average annual basis unless otherwise noted.

Table A1. Detailed costs of time-of-sale energy disclosure policies

Cost type	City A	City B
Design costs		
Minimum FTEs used	1.5	2.5
Consulting services	$30,000*	$27,700
IT infrastructure build-out	$60,000	—
Community outreach	—	Cost of rented space
Total non-FTE design costs	**$90,000**	**$27,700+**
Annual implementation costs		
Minimum FTEs used	1	1**
Consulting services	—	$94,000 over three years***
IT infrastructure upkeep	$2,000	Included in consulting costs
Marketing	500 to 700 mailers	—
Quality assurance	—	—
Incentives and subsidies	—	$26,000 over three years***
Other	—	$3,700
Total non-FTE implementation costs	**$2,000**	**$43,699+**
Participant costs		
Approximate cost of compliance	Dependent on size of building; $110 per deferral†	$125 per assessment

***Consultant costs for program evaluation that led to a policy amendment. **City's reported FTEs were insufficient to successfully implement the program. ***In totaling the non-FTE costs, we included the annualized cost to better compare with other cities. †For the average-size single-family home, the cost of an assessment is about $300 plus a filing fee of $79. For an average commercial or multifamily building, the cost of an assessment is about $1,000 plus a filing fee of $152.**