



Building Performance Standard Module: Housing Affordability



Policy Brief

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Acknowledgements

This policy brief is the result of a collaboration between the Institute for Market Transformation and Elevate. Elevate is a national nonprofit, that designs and implements programs that reduce costs, protect people and the environment, and ensures the benefits of clean and efficient energy use reach those who need them most. We are grateful to the entire Elevate team for their collaboration and help to inform this work, particularly Quinn Biever, Abby Corso, and Hank Love.

Buildings are where we work, send our children to learn, and buy food to feed our families; the built environment touches on almost all aspects of our lives. However, when building policies are created in silos, the results are one-dimensional solutions that miss a critical opportunity to do smarter, more holistic thinking. The Social Priorities BPS Modules work began in 2020, as an effort to dive deeper into how building performance standard (BPS) policies could serve as a platform to regulate more than energy performance and carbon emissions, and include aligned social issues such as health, housing affordability, and resilience. The goal of the project is to come up with creative, impactful policy toolkits that allow jurisdictions—mainly cities, counties, and states—to add dimensions to a BPS that holistically address complex societal challenges

We are also actively looking to reshape the process by which policy is created, so that voices traditionally excluded from building conversations can be heard. Our team is working to help jurisdictions undertake deep community engagement processes when beginning the policy design process, so that the policy can incorporate solutions that address locally defined concerns and the policy itself is built by community-based practitioners. It's important to note that "community" is meant to encompass, in particular, people who have been traditionally excluded from decision making, such as people of color and residents of low-income and disinvested communities. Business stakeholders are also critical, but residents, especially those described above, have been too long excluded from real estate decisions that affect their health, their energy costs and job opportunities, and their ability to manage climate risks.

This project provides a starting point for dialogue between all community stakeholders, and an opportunity to both expand the definition of building performance policy and to be more inclusive in how we actualize it. The briefs are living documents that will be shaped, strengthened, and added to through our community engagement work. It is in this way that building performance can start to inspire a shift where we all define building performance in the broadest sense, recognizing the interconnectedness of the issues we face as a global community.

This topic, affordable housing, is one of several BPS resources, and we will continue to publish additional Social Priorities BPS modules as we identify additional opportunities for building policies to simultaneously address community concerns. The full collection can be found at www.imt.org/bps.

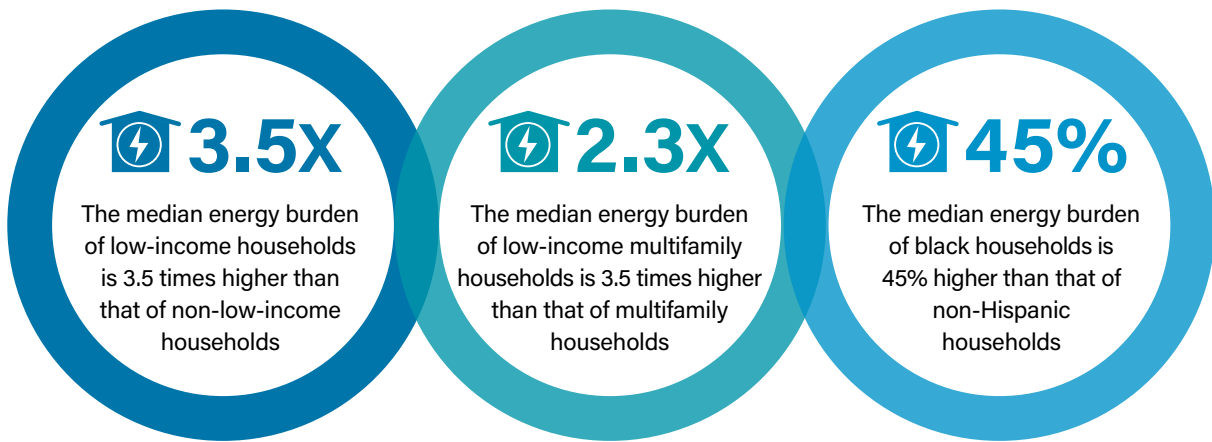
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INTRODUCTION

U.S. cities, states, and counties are acting with increasing urgency to enact policies that reduce energy use and greenhouse gas emissions from buildings such as building performance standards (BPS). At the same time, they also face a crisis in the affordability of housing, where increasing housing costs threaten to displace untold numbers of residents. Nearly half of all renters in the US, 47.5%, suffered from housing cost burdens in 2018, defined as housing costs of more than 30% of household income, while one in four, 10.9 million renters, were severely cost burdened, defined as spending more than half their incomes

on housing¹. This problem is especially acute in communities that already experienced historic disinvestment and disproportionate energy burden. Households with low-incomes experience 350% higher energy cost burdens than other households.² Inequalities in housing cost and energy cost burdens are especially stark in communities of color.³ These compounding crises have only been exacerbated by the COVID-19 pandemic and the resulting economic instability as well as the recent energy cost instability following the Russian invasion of Ukraine.



Source: American Council for an Energy-Efficient Economy [2020 Energy Burden Report](#)

In such a hyper-charged housing market, where the risks of rising housing costs—both rents and energy bills—are so devastating, it is only reasonable that community members are on guard against any policy proposal that could result in further increases in housing costs or lead to displacement. Experiences with what can be called “environmental gentrification”⁴—that is, green improvements to buildings and public space that can lead to increased property values, taxes, and rent⁵—underline these concerns. BPS policies where energy consumption is capped will require owners to invest in their buildings to stay below those caps or face fines for noncompliance. While this is a critical policy tool in the fight against climate change, it is essential that policy makers design BPS policies to protect against increasing costs for the residents of affordable housing, while providing pathways to improve housing alongside the rest of the building stock.

How to Use this Document

This document is meant as an introductory brief for jurisdictions working on [building performance standards \(BPS\)](#) to develop strategies, policies, and programs that address housing affordability and counteract displacement in that context.

Housing is a highly complex and at times, contentious policy space. There is no one-size-fits-all solution to addressing the myriad of issues related to housing affordability across jurisdictions, but this document seeks to describe the landscape of considerations and propose vetted paths forward. As part of the research informing this paper, Elevate conducted a series of interviews with a range of stakeholders in the affordable housing space, including a range of types of owners of affordable housing, tenant advocates, and various practitioners in order to delve into the perceived challenges of BPS as well as to gather input on practical solutions. Learnings and primary source quotes from those interviews have been included throughout the paper, and the full findings can be found in Appendix A.

This document serves as a starting point for jurisdictions to use to initiate discussions with housing and community stakeholders in their BPS policy development process. Any strategy undertaken to address housing affordability within the context of a BPS should be thoroughly examined by internal and external stakeholders who accurately reflect community composition.





Core Principles of Affordable Housing and BPS

Building performance standards are a massive opportunity to lower greenhouse gas emissions from buildings, alleviate energy cost burdens for residents and commercial tenants, and put jurisdictions on track to meeting their carbon reduction goals. In approaching questions on affordable housing and addressing displacement through a BPS, IMT recommends having the following three goals as core guiding principles.

1. Center Community Engagement

“Any jurisdiction interested in a BPS should formalize the group of stakeholders and the process by which they can shape the implementation of the policy. And that group should be representative of the community.

Todd Nedwick, Senior Director of Sustainability Policy at the National Housing Trust (NHT). NHT is a leading housing policy advocate as well as owner of multifamily housing across 13 states.

In developing of a BPS, policymakers should commit to a policy development process that is inclusive, transparent, and equitable. IMT encourages jurisdictions to work with frontline communitiesⁱ to identify those communities' priorities and co-develop a BPS policy that addresses them.

In particular, frontline communities should have a leading role in determining how the policy will address the following:

- The potential effect that performance requirements will have on housing affordability and the cost of living for current renters.
- How performance requirements and supporting implementation programs can be structured to ease the energy cost burden for residents with lower incomes.
- How the BPS and supporting policies can mitigate against cost pass-throughs to renters and other displacement risks.
- The distribution of incentives and technical assistance to buildings that serve frontline communities.
- Representation on advisory boards created by the policy (see the summary of IMT's Model BPS Ordinance for more on the Community Accountability Board, an advisory body that would monitor the BPS policy's ongoing impacts on frontline communities and their implications for equity).
- Other aspects of building performance that are identified by frontline communities such as resilience or indoor air quality.

The [IMT Model BPS Ordinance](#) also emphasizes the importance of having local affordable housing stakeholders—tenant associations, tenant rights advocates, community based organizations (CBOs), and affordable housing providers—serve on bodies that advise the jurisdiction on implementation of the BPS. This will help shape the policy design toward affordability and should also facilitate a transition to giving community members a direct role in rule making and implementation oversight. In such a role, they will be able to provide their firsthand expertise in identifying and addressing the unique issues that arise from the affordable housing sector.

i. IMT uses Ecotrust's definition of frontline communities: "Frontline communities are those that experience 'first and worst' the consequences of climate change. These are communities of color and of low-income, whose neighborhoods often lack basic infrastructure to support them, and who will be increasingly vulnerable as our climate deteriorates. These are Native communities, whose resources have been exploited, and laborers whose daily work or living environments are polluted or toxic."

Special care should be taken to include a diversity of affordable housing stakeholders as many may have divergent interests, such as providers and residents. Affordable housing residents and front-line community residents in particular should be included as early as possible in the BPS development and implementation processes. As many of these stakeholders and CBOs may have limited capacity, it is critical that jurisdictions compensate participants for attending regular meetings, reviewing materials, doing research and community outreach, and that jurisdictions seek to hold meetings at accessible times and locations.

Community engagement should not end with policy adoption. Elevate, a nonprofit dedicated to climate equity, has best practices for community-led policy implementation that promote information sharing as well as ongoing participation and consultation from frontline communities. Relevant government staff should be familiar with these practices, and implement them as part of community engagement. Ongoing stakeholder working groups can help municipal officials identify and work through issues that arise as the new policy is put into practice.⁷

CASE STUDY

Boston, MA

During the policy development of the Boston's BPS, the Building Emissions Reduction and Disclosure Ordinance, the City convened a Resident Advisory Group with recognized leading local environmental justice CBOs including Alternatives for Community & Environment, the Chinese Progressive Association, and City Life/ Vida Urbana.⁶ Resident Advisory Group meetings were held to include frontline community residents from impacted buildings with translation services offered

in eight languages including American Sign Language. This community driven process was vital to building an inclusionary policy development process that provided vital frontline experiences from residents in informing the final building performance standard. Ideas generated from the community were incorporated into key policy features of Boston's BPS including its environmental justice CBO directed Review Board and the Equitable Emissions Investment Fund.



2. Mitigate Against Risks of Displacement

“The unsubsidized stock is the most difficult part of the problem, because it includes smaller buildings that would need sufficient upfront capital.

Ed Connelly, President and CEO of New Ecology.
New Ecology is a non-profit sustainable consultant providing strategic advice to building owners, architects, contractors, utility energy efficiency programs, and state housing finance and energy agencies.

Improving a building's energy performance through efficiency upgrades in order to meet a BPS requirement can be costly. Although energy efficiency investments are well documented to pay back over time, the upfront costs might be too great to bear for some owners, especially for affordable housing providers who typically operate with thin margins and may have limited access to capital.

Subsidized or regulated affordable buildings typically generate low cash flow and operate with limited staff capacity and financial resources. This means that few of these buildings have the cash reserves available to cover the costs of energy improvements that may be needed to comply with a BPS and, further, many subsidies restrict owners from taking out additional loans.

Naturally occurring affordable housing (NOAH) buildings—that is unsubsidized market rate housing where rent is affordable for residents with lower incomes—present even greater risks for displacement. Because these properties are unregulated, there are no protections in place to ensure rents stay affordable. For many NOAH building owners, the biggest barrier for complying with a BPS will be access to funds to invest in upgrades. In the traditional split incentive problem, residents pay for energy costs while building owners are responsible for potentially energy saving upgrades, meaning that while building owners pay for improvements, it is residents who benefit from utility cost savings.⁸ When NOAH owners do not directly receive the energy bill savings, they are more likely to increase rents to cover the cost of retrofits. Lease structures like [Green Lease can assist in bridging the split incentive problem for commercial tenants](#), but they are less common among NOAH properties.

It must be a core priority for jurisdictions, in collaboration with community stakeholders, to explore any and all ways to alleviate these displacement risks from a BPS policy. The remaining sections of this brief outline ideas to be vetted in local policy design conversations. A recent study conducted by Strategic Actions for a Just Economy on the impacts to residents from LA's decarbonization initiatives, emphasizes the importance of policy design, "Tenants have many potential benefits, but any of these must be seen in relation to the drawbacks that decarbonization could impose. A poorly designed policy could easily harm tenants by increasing the cost of both rent and energy, such as if it

were to encourage just electrification to inefficient heating equipment like baseboard electric without encouraging energy efficiency strategies. These higher costs could force tenants to cut back on basic needs or limit energy use and leave them vulnerable to higher temperatures in the home.⁹ They could also potentially displace residents entirely. This displacement of residents with lower incomes tends to contribute to longer commutes for work and basic services, which increases carbon emissions and also can lead to more time between jobs. Jurisdictions should prioritize housing affordability for better economic, environmental, and social outcomes.¹⁰

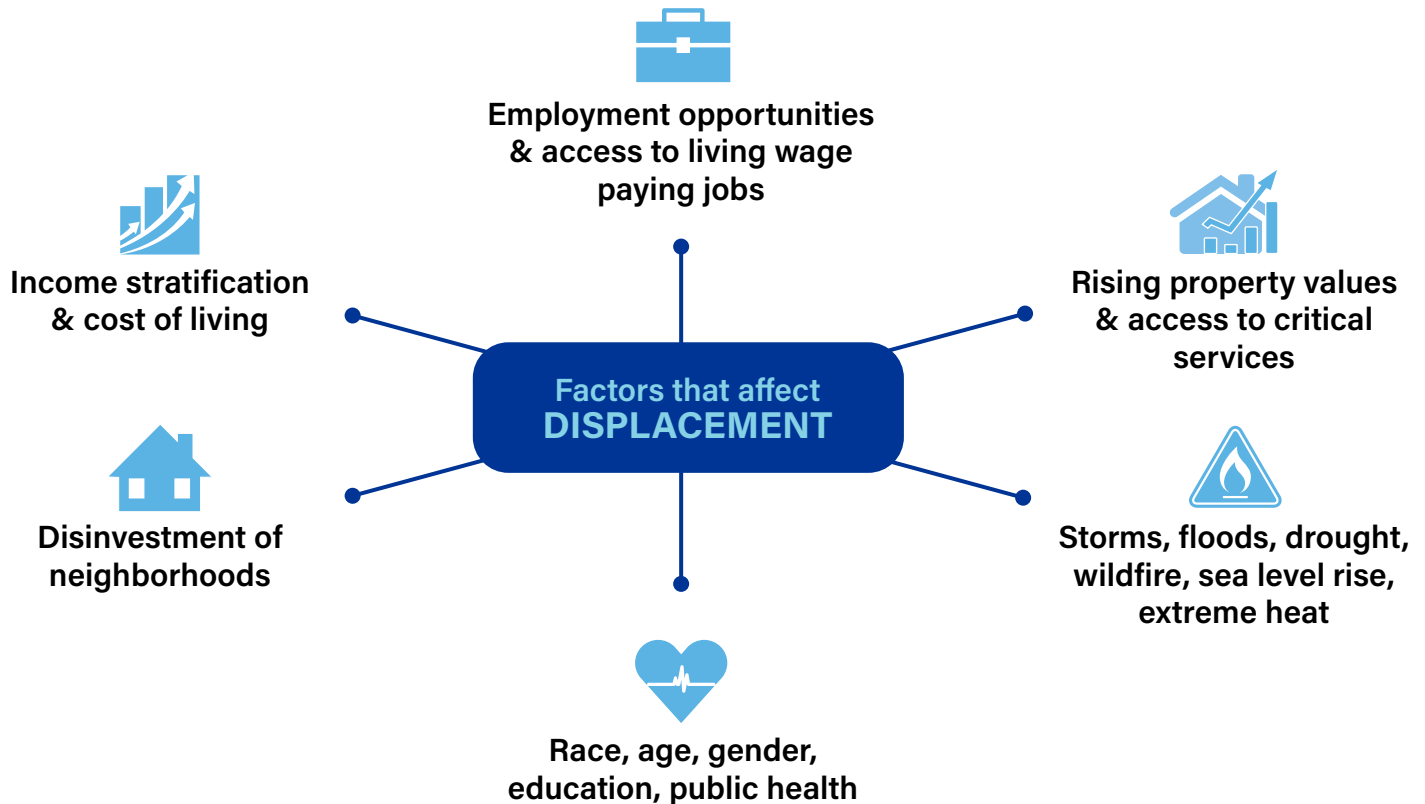


Figure based on image from EcoAdapt 2020

3. Provide Benefits of BPS to All Residents



There are a lot of apartments in bad condition, and what good is a high-performing building that isn't healthy or safe?

John Bartlett, Executive Director of the Metropolitan Tenants Organization, a Chicago-area tenant advocacy organization that seeks to create spaces for residents to provide input in issues that impact their right to safe, affordable housing.

Renters and other community members want the benefits of policies like building performance standards¹¹—including lower energy bills, more comfortable housing, cleaner air, and a healthy environment—just not the risks of displacement.¹² By alleviating energy cost burdens and improving overall housing energy performance, a well-crafted BPS can do much to improve the overall quality, health, efficiency, and even affordability of the housing stock through lower energy bills. Jurisdictions should have the goal of establishing BPS policies that benefit the greatest number of residents and prioritize frontline communities.

Given the complications on displacement risks, some cities may decide to exempt certain affordable multifamily buildings from the requirements of their building performance standards; however, this decision may worsen energy cost burdens for residents with lower incomes.¹³ This dynamic results not only from utility costs taking up a higher proportion of lower incomes, but also because utility costs in households with lower incomes are higher per square foot than the average.¹⁴ If a jurisdiction decides to carve out specific compliance pathways for affordable housing, an effort should be made to ensure residents will still benefit from improved building performance and that residents in affordable buildings are not left to continuing paying inequitably high energy costs.

In many cases, a BPS policy designed to target large buildings, may not have a large impact on the affordable housing stock in a jurisdiction, depending on local housing characteristics. If a community is interested in impacting housing affordability and energy burden directly, the BPS may be paired with a residential-focused policy that better suits smaller housing. The ACEEE guide [“A New Lease on Energy: Guidance for Improving Rental Housing Efficiency at the Local Level”](#) highlights several models and alternative approaches to rental energy efficiency policies that align with the goals of a BPS.



Assessing the Affordable Housing Stock

The first step in the BPS policy development process as it relates to affordable housing and the risk of displacement is to analyze the jurisdiction's existing housing stock. This should include mapping regulated and subsidized affordable housing as well as NOAH buildings, both those that will be required to comply with the policy and those that will not.

Understanding the universe of affordable housing in the jurisdiction—both within and outside the proposed BPS covered building list—will be critical for assessing how best to support different types of buildings as part of the policy design and implementation processes. It may be discovered, for example, that much of the NOAH building stock, which is most at risk of rising rents in the jurisdiction, are not covered by the policy because that category of housing is predominantly in smaller buildings that aren't covered in the BPS square footage requirements. In such a case,

the affordable housing that will be covered may be largely regulated, limiting the risk of displacement but increasing the need for targeted programs to assist subsidized and regulated affordable housing, while non-covered NOAH buildings will require a separate programmatic approach. This nuanced landscape information on the affordable housing stock in the jurisdiction will also be critical for communication with community based organizations and residents with lower incomes, so that solutions can be surfaced that speak to local risks.

Defining Affordable Housing

Defining what qualifies as “affordable housing” in a BPS policy is a key component to ensuring the policy parameters are clear to the affected market and are appropriate to meet local goals. [IMT's Model BPS Ordinance](#) contains a number of recommendations on how to approach this definition, though the final decision must be made locally.

The definition should be aligned with local affordable housing programs and rental regulations. In short, it must make sense to local affordable housing stakeholders. The jurisdiction may consider adopting multiple definitions of affordable housing to consider the varying types of housing locally, including but not limited to subsidized affordable housing, rent-controlled housing, market rate naturally occurring affordable housing, or NOAH. It is recommended that NOAH be given particular attention due to the increased risk of rent increases, as described above.





Potential Policy Approaches

The following sections of this brief highlight potential approaches jurisdictions can investigate in collaboration with local stakeholders. These are not one-size-fits-all recommendations but rather starting points for conversations with community members and affordability advocates. There is no one solution to preventing environmental gentrification and displacement, but well-vetted and designed combinations of policy approaches can help to address and minimize unintended consequences.¹⁵ With the help of expertise from front-line communities, jurisdictions can seek out creative and intersectional solutions.

Provide Flexibility for Affordable Housing within BPS

“One of the challenges with subsidized housing is that current BPS policy provides flexibility with financial infeasibility such as bankruptcy or back taxes, but that does not accommodate those building owners who are restricted in terms of the use of their reserves who are also unable to take on more debt between recapitalization periods.

Todd Nedwick, Senior Director of Sustainability Policy
at the National Housing Trust

An important starting point to address displacement risks from BPS policies is to build compliance flexibility into the structure of the policy itself. [IMT's Model BPS Ordinance](#) contains provisions designed to accommodate many needs of affordable housing such as through the Building Performance Action Plan framework. This can give owners of affordable housing the flexibility to align energy efficiency investments with existing refinancing periods. This matters because many regulated and subsidized affordable housing buildings are on longer capital refinancing schedules than other buildings, often 15 years or longer. Intermediary compliance targets for BPS are often shorter than that, most being as short as 4 to 5 years, which would require affordable housing to make significant investments outside their refinancing cycles. These refinancing cycles are in many cases the only time affordable housing owners have access to the capital necessary to make major upgrades.

Creating flexibility within the BPS ordinance can take several forms:

- The ordinance can allow for performance standard due date flexibility for affordable housing buildings. These could be in the form of an extension for a number of years so that the due date is aligned with the affordable housing's refinancing cycle, creating a reasonable buffer.¹⁶ This strategy was used in St Louis's BPS, which allows qualified affordable housing an additional two years to meet the required performance targets.
- Affordable housing owners can submit a customized Building Performance Action Plan detailing the potential energy conservation measures they can take in the immediate term and the timeline for their implementation of long-term upgrades aligned with their refinancing cycle. It is important to note that developing a Building Performance Action Plan requires technical capacity and meeting that requirement may necessitate that jurisdictions provide compliance assistance through something like a building concierge service (see below). The availability of turnkey technical assistance is a critical resource to ensure all buildings can comply and improve on time and at scale.

Design BPS to Encourage Efficient Electrification and Energy Cost Savings

“Currently, heat pumps increase operating costs, and some distressed properties can’t take that on, so, in those cases, the focus should be on efficiency measures as much as on electrification to allow for offsetting some of the cost impact.

Michael Brod, Sustainability Project Manager at
Jonathan Rose Companies.

Jonathan Rose Companies is a national development, owner’s representative and investment management firm with a national real estate portfolio.

A well-designed BPS has the potential to substantially alleviate the energy cost burdens of many frontline communities and residents. However, this potential is based on ensuring that the BPS is designed to encourage cost saving energy efficiency and decarbonization first and foremost. Not all building decarbonization measures lead to cost savings for building occupants. Upgrades aimed at electrification are particularly tricky. Modifying a building to use electric resistance heating, for example, will typically increase operational costs.¹⁷ A BPS should be designed to encourage cost saving energy efficiency, with building electrification coming from efficient technologies like heat pumps where possible.¹⁸ Reducing energy cost burdens should be a key metric for policy success. Designing a BPS that encourages only electrification without corresponding energy efficiency measures may result in increased energy burden and should be avoided. IMT recommends that BPS include site energy use intensity as a performance metric to encourage efficiency and reduce energy burden. In addition to the site energy use intensity performance metric, IMT also recommends the use of another metric: onsite and district thermal GHG emissions. Using a direct emissions metric without safeguards against inefficient electrification will result in increased energy burden and, so, should be avoided.

Structure Enforcement Equitability

In designing the enforcement mechanisms for the BPS policy, jurisdictions may choose to adopt a progressive non-compliance fee structure. Instead of all non-compliant buildings paying the same flat fee, NOAH and subsidized

affordable housing could be permitted to pay less. One way to determine the appropriate fee is to tie it to the appraised value of the building, as recommended by the [IMT Model BPS Ordinance](#).

Regulate Cost-Pass-Throughs

“Subsidized housing has the advantage of built-in tenant protections; owners can’t pass on cost to renters, which is not the case in unsubsidized housing. So, any jurisdiction considering a BPS should also consider complementary policies that provide tenant protections from cost pass-throughs.”

Todd Nedwick, Senior Director of Sustainability Policy
at the National Housing Trust

One of the main displacement risks that may result from a BPS is that building owners may pass the costs of compliance on to multifamily residents in the form of rent increases. If such rent increases outweigh the benefits of reduced utility bills for residents, this could help fuel displacement. This risk is highest in the unregulated NOAH stock where affordability covenants are not mandated or monitored. To combat this risk, jurisdictions should explore provisions that limit cost pass-through to residents from energy conservation measures.

If the jurisdiction has the authority to enact rent control regulations, the BPS could set parameters for how building owners can pass improvement costs through to tenants.¹⁹ Under such a policy, the percentage of the total cost of energy performance upgrades that owners can pass on to tenants is limited; owners must amortize the cost pass-through over a minimum number of years. The seismic retrofit ordinances from a number of California municipalities provide an example of how such a policy could be constructed.²⁰ Similar to a BPS, these policies require owner investment.

That said, a comprehensive ban on all rental increases can risk causing hardship for building owners as it prevents their ability to recoup expenses made in order to comply with a BPS policy. A more targeted cost pass-through regulation may be a solution to this challenge. Under such a focused cost pass-through requirement, an owner can raise the rent no greater than the average monthly energy cost savings enjoyed by residents from the performance improvements. Through this requirement, the owner is able to recoup some of their costs of complying with BPS while the resident should see no net increase in their cost of living and hence no displacement pressure. Effective implementation of such an approach will require careful regulations covering estimation of projected energy cost savings. Jurisdictions may choose to apply this requirement to only specific buildings deemed most at risk for displacement, such as NOAH buildings, identified through the recommended housing stock analysis.

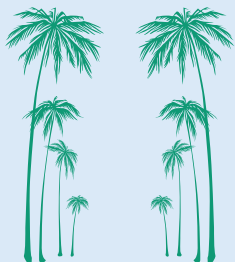
One implementation mechanism of such a requirement may be through a rent review board, whereby owners of designated covered buildings meeting the BPS requirement need to get approval of any rent increase above a certain amount and the board reviews any complaints. The Community Accountability Board in the IMT Model BPS Ordinance could also fulfill this role. Owners would need to demonstrate to the board the expected costs associated with complying with BPS, the expected energy cost savings from making those improvements, and timeline for the realization of these energy cost savings for residential tenants.

A cost pass-through requirement tied to BPS—limiting any rental increases to no greater than the average energy cost savings from energy conservation measures implemented to meet the BPS for the length required to pay for such improvements—could be a powerful tool for jurisdictions in preventing displacement from their BPS. IMT recommends pursuing such approaches where possible. That said, such a mechanism can only be implemented in jurisdictions that have the authority to implement rent control in some form. Presently the majority of states in the U.S have partial or total bans on rent control.²³ Jurisdictions should investigate their authority for rental regulations before exploring this policy approach.

CASE STUDIES

Beverly Hills, CA

Under Beverly Hills municipal code,²¹ cost pass-throughs for required seismic retrofits are not allowed. Residential tenants have to contact the City’s Rent Stabilization Commission if they receive an unlawful rent increase including an unlawful pass through. In the event of an unlawful cost pass-through, the rent increase is reversed by the Commission.



Washington, DC

In Washington, DC, building owners can issue rent surcharges to cover capital improvements with the approval of the Rental Accommodations and Conversion Division. Depending on the extent of the improvement, the surcharges must be amortized over a period of 64-96 months and must not be more than 15-21% of the prior rent²² The impact of this is that tenants are not subject to a permanent increase in their base rent from approved capital improvement surcharges.



Chula Vista, CA

The best example of cost past-through regulations tied to BPS to date is with Chula Vista’s Building Energy Savings Ordinance.²⁴ Under this standard, building owners are restricted in the amount of costs they can past onto residential tenants at once. Instead they must amortize, or gradually introduce the cost past-through, over five years for any required energy audit performed or over the whole expected life-cycle of any energy savings measure implemented. This framework allows for owners to recoup expenses but only gradually and aligned with the total life expectancy of energy savings measures, helping to alleviate pressure on rent increases.



Establish a Turnkey Financial Assistance Program Compliance Pathway



[Affordable housing buildings] should not be burdened at all. Many are already struggling, so their requirements should be as gradual as possible and covered at 75% or more of the associated cost.

Stacie Young, President and CEO of Community Investment Corporation (CIC). CIC is the Chicago region's leading lender for affordable rental housing.

To alleviate pressure on targeted building owners, jurisdictions can consider establishing a compliance pathway connected to a turnkey financial and technical assistance program. [of the IMT Model BPS Ordinance, Section 8: "Technical and Financial Assistance to Building Owners,"](#) instructs jurisdictions to convene a task force to analyze such a program. Using a program like this as a compliance path aims to give building owners with limited funding capacities, such as affordable housing, the full suite of resources they need to pursue deep energy retrofits in order to meet the BPS requirements. There are a range of ways that this program could be structured and funded, weaving together proven concepts like energy as a service models, revolving loan funds, green banks, and on-bill financing from utilities programs as examples. Tapping into a variety of funding resources is critical for program success.

The nonprofit Elevate works with Sustain Dane in Dane County, Wisconsin to help small- to medium-size affordable multi-family housing become more efficient and resilient while reducing operating costs. [The program](#) provides building owners with:

- Building efficiency assessments to identify energy, water, and solar opportunities
- Three-year implementation roadmap to help owners navigate the timely implementation of the identified efficiency measures
- Step-by-step technical support to navigate efficiency programs, incentives, and contractors

This program helps make high performance buildings easier to achieve by providing support services for building owners who are interested in energy efficiency, water efficiency, and solar.

Under this approach, building owners can opt to participate in the program as their chosen compliance path. Buildings receive energy audits paid for by the program that in turn produce a prioritized list of efficiency projects. Energy performance upgrades are made to buildings, ideally at no cost to owners and residential tenants. This can be accomplished in phases over a several-year period, allowing an initial focus on low cost/no cost measures that provide immediate savings. Participating owners and residents would pay their energy bills at a guaranteed reduced amount. To simplify program management the utility would collect these payments through methods like on-bill financing program and remit the “excess” (amount below the guaranteed bill reduction) to the jurisdiction.

By treating all participating buildings as a portfolio, risks to the turnkey financing program administrator would be substantially reduced. With a portfolio approach, as long as achieved savings on average are equal to or higher than

projected savings, then the entire program is a success. This allows the inclusion of historically higher-risk and disinvested buildings that are frequently underrepresented in traditional energy efficiency programs, though they often have the highest potential for savings.

By participating fully in the program, from energy audit start to project completion, buildings will be marked as compliant for one or more BPS cycles. The jurisdiction can set up the program’s participation requirement to put affordable housing buildings, including NOAH and regulated affordable housing, first in line to help ensure that assistance is being targeted where it is needed most. Such a compliance pathway would require that either an existing or newly created entity has the means to set up such a financing model and then coordinate closely with the jurisdiction during the early stages of the BPS policy development process.

Provide Assistance through BPS Implementation

“For most, capacity is too low to add more to their load. Without customer assistance, technical assistance, and financial planning assistance, it doesn’t matter if there is an incentive or a municipal mandate; they are limited by time and energy.

Katherine Elmore, Manager of Energy Efficiency and New Business at Community Investment Corporation.

To increase compliance, jurisdictions may offer support services for all buildings affected by BPS policies. To lower displacement risks, they may provide targeted assistance to front-line communities. The IMT Model BPS Ordinance includes a section directing a task force to create a combined funding, technical assistance, and help desk program for buildings, including affordable housing buildings. The intent is to provide soft and hard cost assistance for owners in meeting BPS requirements. Some type of guidance in meeting the new requirements is necessary, and compliance is likely to be higher if building decisionmakers have easy access to relevant information and tools. This is true even if the jurisdiction opts to not include program participation as a formal compliance path in itself.

“[You should have] someone local to the jurisdiction who knows of and can offer access to various funding and incentives and can name the risks and benefits. [Someone who can say] ‘Apply that to benchmarking assistance, audit assistance, scoping and financing assistance... those would all be great.

Krista Egger, Vice President of Building Resilient Futures at Enterprise Community Partners. Enterprise is a national nonprofit that works to create solutions, access to capital and community development approaches supporting affordable housing.

Building Concierge Services

Depending on capacity, jurisdictions may set up help desk hubs or building concierge services that can provide a high level service to lead affordable housing building owners through the process of upgrading their buildings and complying with BPS. Such services may take the form of:

- Simple “hand-holding” assistance to guide affordable housing owners and managers through the BPS compliance process
- Guidance on how to fill out a Building Performance Action Plan (see above)
- Support accessing financial resources
- Basic information on building performance upgrades

Owners and managers of affordable housing buildings, in particular, might have limited staff capacity to navigate all of the resources available to them. Experience has shown that without dedicated help desk efforts to recruit and assist affordable housing, clean energy programing tends to primarily benefit higher income residents.²⁵

CASE STUDY

Washington, D.C.

The [Building Innovation Hub](#) is a project set up to connect building professionals to each other and educational resources.²⁶ The Hub is a project of IMT that, in collaboration with the District of Columbia provides resources to building professionals ranging from concept overviews to detailed action guides, including equitable

procurement guides and case studies in market leadership.²⁷

The Building Innovation Hub has done two concierge service pilots to help under-resourced buildings, including target 24 regulated affordable housing buildings covering 1.1 million square feet.



Financial Assistance

Access to financial resources are often the primary obstacles for affordable housing owners in implementing performance upgrades.²⁸ Identifying revenue streams that can be used as no-cost capital to assist owners seeking energy performance improvements and prioritizing frontline communities to receive those resources is the most important strategy for any jurisdiction seeking equitable climate action. As part of the policy development process, jurisdictions should endeavor to analyze the scale of cost for upgrading the affordable housing stock to comply with BPS requirements and they should convene local stakeholders early—long before policy passage—to discuss how this work will be financed. Jurisdictions may be able to derive some funds

from the BPS policy itself. Under the IMT Model BPS Ordinance, buildings that do not meet BPS requirements can pay an Alternative Compliance Payment. By structuring enforcement as an “Alternative Compliance Payment” as opposed to a “fine” or “fee,” jurisdictions may be able to better earmark such monies for energy performance retrofit assistance programs, especially those assisting NOAH and regulated affordable housing. These Alternative Compliance Payments from low-performing buildings can fund improvements benefitting underserved communities, alleviating displacement risks. Partnership with utility, state, or federal energy efficiency programs can also assist in augmenting available revenue streams from Alternative Compliance Payments.

CASE STUDY

Boston, MA

Under Boston’s BPS requirement, the Building Emissions Reduction and Disclosure Ordinance, buildings that don’t meet their emissions targets can pay an Alternative Compliance Payment of \$234 per metric ton of CO₂e over the target per year.²⁹ Following a similar path as the IMT Model BPS Ordinance, monies derived from these Alternative Compliance Payments are used to provide funds for an Equitable Emissions Investment Fund

under the direction of a Review Board, with a majority representation of environmental justice and front-line community based organizations.³⁰ Under the proposed ordinance, funds from the Equitable Emissions Investment Fund and the Alternative Compliance Payments must be used to, “support, implementation, and administration of local carbon abatement projects that benefit the City of Boston prioritizing Environmental Justice Populations.”³¹



One strategy to help combine financial assistance with affordability is to establish voluntary rent stabilization covenants as part of the financial assistance program. Under these covenants, in order for NOAH building owners to access the financial assistance they would have to agree to certain affordability commitments. These can include caps on rent increases above a certain amount or even a “bright-line” prohibition on any rent increases for a period of time after the receiving financial assistance.

To prevent rent increases, it’s important to ensure the financial assistance provided is sufficient to cover not just the performance upgrades but also the opportunity cost for owners of not raising their rents.ⁱⁱ This way NOAH owners are properly incentivized to take advantage of the financial assistance on offer even with the affordability covenants in place.

PROGRAM HIGHLIGHT



Weather Assistance Program

The U.S. Department of Energy’s Weather Assistance Program (WAP) was established to provide energy efficiency resources to residents with lower incomes, including residential tenants. Statute and regulations for WAP are structured to ensure that the benefit of energy performance upgrades go straight to the resident. This includes that units participating in WAP cannot be subject to rent increases for a period of time. The length of time restrictions on rent increase varies depending on state from as low as one year in Massachusetts, 18 months for Alaska, and two years for California. Further protections that states have implemented include those against evictions and conditions of sale whereby future owners of the buildings are also bound by the covenants on rent increases.³²

ii. Expressed in economic terms; if owner needs to improve their building performance and it would cost \$X dollars to do so, they can normally recoup that expense by raising gross rent \$X or more. An incentive package of \$Y that includes affordability covenants would have to be at least $\$Y > \X otherwise owners would have no reason to use it. If $\$Y < \X it is more expensive for the owner to take the incentive when compared to just raising rent. And in a market where housing prices are already rising there is an additional opportunity cost of \$C in terms of expectations of likely future revenue from higher rents that owners would be missing out on if they sign on to an affordability covenant. So $\$Y > \$X + \$C$ or the incentive has to be greater than the cost of building performance upgrades plus the opportunity cost of expected future rent increases.

Explore Complementary Tenant Protection Policies

“Subsidized housing has the advantage of built-in tenant protections—owners can’t pass on cost to renters, which is not the case in unsubsidized housing. So any jurisdiction considering a BPS should also consider complementary policies that provide tenant protections from cost pass-throughs.

Todd Nedwick, Senior Director of Sustainability Policy at the National Housing Trust.

Addressing housing displacement is complex, both generally and in terms of “environmental gentrification.” A BPS policy is just one tool available to jurisdictions to address the intersections of climate change, energy cost burden, and housing affordability. Other complementary resident protection policies and programs can be adopted alongside a BPS.³³

Tenant Rights

One approach that jurisdictions may explore is an emerging framework of tenant rights.³⁴ In the majority of U.S. states, renters lack effective protections.³⁵ A “Tenant Bill of Rights” is a tool jurisdictions can adopt in order to establish a number of minimum obligations on building owners to protect health, well-being, cleanliness and maintenance quality, and access to housing. Such rights can include “Just Cause” eviction ordinances that seek to prohibit “no-fault” evictions at the will of the owner and restrict them to only “just causes” such as severe damage to the property, failure to pay rent, or use of the unit for illegal activity.³⁶ Jurisdictions can also provide legal or financial aid for residents facing eviction or displacement pressures. These rules and programs can assist in de-incentivizing housing owners from pursuing evictions and rental-to-condominium conversions, though they cannot prevent these outcomes entirely.

PROGRAM HIGHLIGHT

Washington, D.C.

The Tenant Opportunity to Purchase Act (TOPA) gives multifamily renters with low to moderate incomes the “right of first refusal” for their buildings when the owner wishes to sell the building.³⁷ Multifamily tenants and their associations can thus pool their resources to match owner’s asking price and become owners of their own units and buildings.³⁸ This policy helps to preserve existing affordable housing, keep current residents in place, and acts to limit the conversion of NOAH units into things such as condominiums for higher-income residents.



“There are a few tools to keep rents in place. One is regulation, but another is increasing the supply so that people can have a real choice in where they want to live and what they can pay.

John Bartlett, Executive Director
of the Metropolitan Tenants Organization

Increase Supply of Affordable Housing

No state in the U.S. has an adequate supply of housing for households with lower incomes. On average there are only 36 available affordable rental units for every 100 renter households experiencing extremely low-incomes.³⁹ Jurisdictions looking to ease displacement pressure may wish to explore strategies for increasing the affordable housing supply outright.⁴⁰ Jurisdictions may use zoning or other tools to require newly constructed housing to contain a certain amount of affordable housing, adopt policies to convert under-utilized market rate units into affordable housing, or invest directly in the creation of more subsidized public affordable housing.

Different housing strategies can have different impacts on the total supply of affordable units and their distribution. There are potentially many options available to jurisdictions seeking to expand the supply of affordable housing. Creative use of a jurisdiction’s powers can serve as excellent counter-pressures to displacement risks.

CASE STUDY

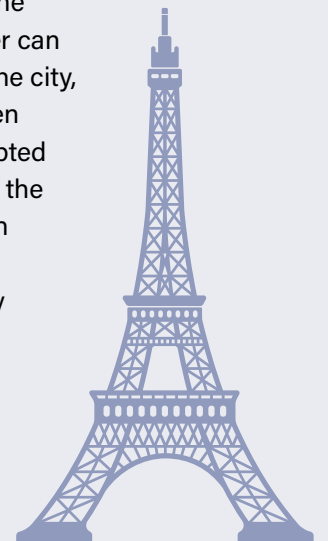
Inclusionary Zoning in NYC

Under one New York City proposal, mandatory inclusionary zoning requires that developers set aside 25-30% of apartment units for people making an average of 60% to 120% of the area median income.⁴¹



Paris’s Right of First Refusal Ordinance

Paris has established a “right of first refusal” to purchase multifamily buildings coming on the market and convert them to affordable, public housing. Under the rule, when an owner of an existing designated multifamily building wishes to sell their building, they must sell it to the city first. The city offers a market rate for the building, and while the owner can negotiate on the price with the city, they cannot sell it on the open market unless the city has opted to pass. If the city purchases the multifamily building, it is then converted into subsidized affordable housing owned by the city.⁴² In this way, public affordable housing can be continuously added, on a rolling basis, out of the existing housing stock.





Summary Recommendations

Rooting a BPS in both climate and housing justice is possible and is a desirable policy goal. Jurisdictions should aspire to building a robust BPS policy that is able to deliver improved building comfort and lower energy cost burdens. A well designed BPS policy can alleviate issues around environmental gentrification and displacement while also addressing existing energy burden inequities.

Summary Recommendations

- **Launch** an inclusive policy engagement process that centers front-line communities and community based organizations based in communities most at risk for displacement.
- **Incorporate** a diversity of voices from the affordable housing, tenant rights, environmental justice, and front-line communities into oversight boards for the BPS policy.
- **Design** the BPS to encourage cost saving energy efficiency measures.
- **Build** flexibility within the BPS policy for regulated and subsidized affordable housing so that they can work to meet BPS requirement on timelines aligned with their capital refinancing cycles.
- If the jurisdiction is allowed, **establish** caps on cost-past throughs from building performance upgrades in meeting BPS policy requirements, such that any rent increase cannot be greater than the energy cost savings resulting from the building performance upgrades.
- **Create** a turnkey retrofit financing program that functions as a compliance pathway, prioritizing subsidized and naturally occurring affordable housing for participation.
- In the implementation phase, **deploy** help desks, building concierge services, technical assistance programs, and financial assistance programs with affordability covenants where possible that target helping subsidized and naturally occurring affordable housing buildings in meeting BPS requirements.
- **Explore** other non-BPS strategies to protect and expand the affordable housing stock including local tenant projections and strategies to increase the supply of affordable housing within the jurisdiction.





Appendices

Appendix A: Summary of Key Findings from Stakeholder Interviews

In 2022, Elevate completed 13 interviews that included seven affordable housing developers, one city implementing a Building Performance Standard (BPS), a Community Development Finance Institution (CDFI) that lends to affordable property owners, the national association for the largest nonprofit developers, two program implementers, and a tenant advocate, as well as the results of a focus group of three developers convened by Elevate in 2021. The interviewees were asked for their thoughts on how a BPS, if implemented, would affect their operations as well as their suggestions for design of a BPS to have the least impact on their operations and costs. The following summarizes themes from the interviews as detailed by Elevate.

Program Development Considerations

1. Conduct a transparent and equitable community engagement process to collect feedback and ideas from all sectors and stakeholders that could be affected by the new ordinance.

The inclusion of building owners and community-based organizations is necessary to provide input to the implementation process. Cities like Denver, Colorado and Washington DC have found the establishment of a diverse BPS 'Taskforce' to be critical to equitable implementation. Energize Denver mandated that their task force be at least 40% people of color and Washington DC's task force includes 14 members from different sectors of the industry including building owners, tenants, utility and oil and gas company representatives, nonprofits, labor and workforce development, environment and clean energy advocates, and city council, assembled to identify opportunities and challenges and advise implementation. Jurisdictions interested in a BPS should formalizing a group of stakeholders who are representative of the community and the process by which they can shape implementation of policy.

2. Establish a communication strategy and benchmarking program prior to implementing a Building Performance Standard.

All owners expressed the need for a clearly stated roadmap with requirements, alternative compliance pathway processes, and to establish communications between them and the relevant city officials. Connections between different city departments, between owners themselves, and between other essential players would also establish trust and develop a sense of purpose. Concern for compliance diminishes when program administrators are nonresponsive or only concerned with enforcement. Interviewees noted that communication and understanding are often insufficient and often don't focus enough on owner-focused issues such as sustaining their mortgage, tenant retention, and asset-building. Additionally, emphasizing that compliance contributes to larger efforts like combating climate change and improving indoor air quality and health gives the process "a feeling of purpose, rather than just another documentation exercise." Long-term planning using lifecycle data requires much more effort, but can inspire owners' fiscal confidence, enable them to take advantage of recapitalization opportunities, and ultimately lead to better performance. Many agreed benchmarking should be the precursor to a BPS as it establishes processes related to utility data access and understanding of energy usage and would be especially helpful in areas where historically there has not been code enforcement.

Program Design Considerations

1. Develop a tiered classification system based on building and portfolio size and type that determines BPS parameters, performance requirements, and timelines.

All owners agreed that a BPS should first include larger buildings, later incorporating smaller and under-resourced buildings as the necessary additional funding and capacity to assist that sector are developed and available, including free education, energy assessments, and cost analyses. Katrina Managan, Director of Buildings and Homes for the City of Denver, defines “under-resourced” buildings using a variety of indicators, including energy burden and asthma rates residents, and includes “human service providers” such as senior care facilities, libraries, etc. A benchmarking ordinance should determine the building size cutoff and provide the data needed for a better understanding of energy-burdened geographies. Many interviewees believe owner capacity should be a tier-determining factor. Since larger portfolios belong to owners with the capacity to manage them, some prefer to use the number of units they manage as its metric, while others countered that managing a larger portfolio has greater capacity demands. Sharon Jaye, Energize Denver Policy Manager, instead prefers comparing capital budgets because they are independent of portfolio size, while Charlene Andreas, Director of Affordable Housing at LUCHA, an affordable housing provider, sees net operating income as a good indicator of available resources to hire additional capacity. Some owners thought subsidization should be factored in as well, as subsidized housing owners are already compliant with their subsidy’s pre-existing standards, have exclusive access to government grants and refinancing options, and often have more sophisticated knowledge and capacity than an unsubsidized owner. But others pointed out that federal money, has accompanying standards and requirements that add both costs and restrictions on spending, nullifying the advantage.

2. Create a Building Owner Hub and hire case managers assigned to each building tier, in addition to sufficient technical and financial assistance personnel and materials.

The most frequent concerns with BPS requirements were regarding capacity and assistance needs. According to Katherine Elmore, Program Manager at Community Investment Corporation (CIC), the leading affordable housing lender in the Chicago region, mandates and incentives don’t matter as much as customer, technical, and financial planning assistance because owners are most limited by time and energy. Krista Egger, VP of Initiatives at Enterprise Community Partners, a national nonprofit supporting affordable housing, agreed and added that even huge housing portfolios like Mercy Housing have capacity concerns as they may work with hundreds of utility service providers. Marcy Huttas, Business Process Improvement Manager and Senior Program Analyst at Neighborhood Housing Services, a HUD-certified housing counseling nonprofit organization, suggested building owner hubs include a network for sharing program feedback experience and contact information. However, after Charlene Andreas, Director of Affordable Housing at Latin United Community Housing, pointed out that there are owners who don’t care or aren’t even aware of hubs and resources, Michael Brod, Sustainability Project Manager at Jonathan Rose Companies, a national affordable housing developer, suggested there be a case manager assigned to keep track of the performance requirements and timeline for each building tier. Egger agreed and recommended they be local to the jurisdiction, knowledgeable of available funding and incentives (and risks and benefits), and able to assist with access. A version of this can be found in Washington DC where a staffer at the Department of Energy is specifically assigned to help owners access the services and resources they need.

3. Pair building performance requirements with an adequate and corresponding suite of incentives and financial assistance for owners of affordable housing including unsubsidized affordable housing.

Many agreed that low-capacity owners with small portfolios should be prioritized for energy assessments and incentives and financial assistance. According to Stacie Young, President and CEO at CIC, a BPS should not be an added burden to this category of owners; their requirements should be as gradual as possible, and their costs should be covered at 75% or more. Denver's BPS affords small, under-resourced buildings more resources for longer and their requirements start with an LED lighting upgrade, which is free with available utility programming. Beyond their price, low and no-cost offerings are a good starting place because they can serve as a first experience in accessing programming. To improve offerings, some owners suggested municipalities work to improve healthy housing, building envelope (air-sealing and insulation), and efficiency incentives during the benchmarking phase, and one owner requested that BPS policy account for building certification and verification costs. Jessica Jones, Senior Real Estate Development Manager at Enterprise Community Development Corp., shared nonmonetary incentives, including accelerated permitting waived penalties for demonstrating and adhering to a compliance plan. Another common suggestion was to create a reward system with incentives and rebates for under-resourced buildings that accomplish their goals on or ahead of time, as Denver's 'Pay for Performance' program does.

4. Partner with utilities to provide whole building benchmarking data at no additional cost to owners.

A major barrier for all affordable housing is inaccessible utility data. For some individually metered buildings, data has to be requested or even purchased via a "disclosure fee." Correcting this issue may require policy changes to state data privacy laws, but many see data access as vital to the success of a BPS ordinance. To then manage building data and identify buildings at risk of noncompliance, organization-affiliated owners often use software like WegoWise, but many find it to be a financial and staffing burden to operationalize and, therefore, not an accessible tool for many owners. Andreas believes there are three possible solutions: 1) cities must offer resources to cover these costs, 2) work with state agencies to change policies to allow these costs to be incorporated into the operating budget, or 3) utilities should bear the cost and responsibility of data management since they have both the data and the resources to do so. Cliff Pouppirt, Real Estate and Construction Manager at Westside Housing, a resilience and sustainability-focused nonprofit community development corporation, suggests that policymakers at least collaborate with utilities so underperforming buildings can be automatically notified of available programs and incentives. Andreas added that a municipality could also make an agreement with the utility to share that responsibility so there isn't an added burden on owners.

5. Package energy assessments and performance incentives with health and safety assessments and incentives, and tie all incentives to commensurate regulations.

Buildings should be healthy and safe, not just efficient, according to John Bartlett, Executive Director of Metropolitan Tenants Organization, a tenants' rights and advocacy organization. He believes energy assessments are an opportunity to conduct much-needed health and safety assessments. Joseph Lopez, Executive Director and CEO of the Spanish Coalition for Housing, a nonprofit housing agency, suggested that pervasive deferred maintenance like electrical upgrades, water damage, and roof repairs be packaged with efficiency programming. Owners generally agreed that regulations like the prohibition of "flipping" units to market rate should be tied to some incentives. Since subsidized housing has built-in tenant protections from rent increases, cities considering implementing a BPS should consider comparable tenant protections for all affordable housing, especially unsubsidized buildings. While there are legal and policy tools like affordability covenants that can be built into the deed or contract for a property in exchange for incentives, Stacie Young cautioned against any rental restrictions disproportionate to the resources being offered. Funding resources should be tied to tenant protections only when necessary and for an appropriate duration commensurate with the subsidy. It was also suggested that BPS policy consider giving tenants the right of first refusal and use of available resources to purchase their buildings to preserve its affordability by preventing sale on the private market.

6. Use carbon emissions and energy burden as metrics for progress, and buildings where these are highest should be among the first to receive energy assessments.

Because areas of high energy burdens perpetuate poverty and are often linked to substandard or aging housing stock, they should be prioritized for building assessments, upgrades, and incentives. In late 2021, Washington DC launched a retrofit accelerator that uses benchmarking data to target buildings for an energy assessment which identifies potential improvements, costs, and incentives. Buildings with a high concentration of energy-burdened residents should be municipal priorities. Owners should be automatically notified of their building's energy status by multiple outlets since complex ownership structures or management by a third party are inherently less direct paths to the decision-maker. Owners with BPS compliance experience said energy use is an obsolete metric because it promotes efficient natural gas furnaces and other fossil-fuel-powered systems that achieve an energy reduction but at the cost of proliferating carbon-burning equipment. Carbon emissions should be measured instead, and requirements should focus on performance levels, rather than reductions. For example, an affordable housing owner in Los Angeles who had been implementing efficiency upgrades prior to the city's benchmarking, audits, and retro-commissioning ordinance struggled to comply with the ordinance and was fined because the city policy's requirements are based on carbon emissions reductions that were nearly impossible for his already-efficient building to achieve. To avoid penalizing well-behaving owners, require buildings to meet carbon emissions performance levels and incentivize, but don't require, reductions.

7. Levy fines and penalties on an escalating scale based on owner type direct those payments to a Building Performance Trust Fund created by the ordinance, if one does not already exist.

It was frequently suggested by participants that there should be no or limited financial consequences for low-capacity owners. To accommodate this, one owner suggested BPS policy should identify criteria by which “financial infeasibility” is defined because while existing policies typically offer flexibility for financial hardship like bankruptcy or back taxes, they often fail to address situations where owners are financially restricted and between recapitalization periods. Another recommended there be an accountability policy for noncompliant owners who demonstrate a “reasonable level of effort” to differentiate consequences with owners who made no or little attempt to comply. For high-capacity owners, interviewees recommended penalties be proportionate to the net rental income of the owner or business. If financial penalties would be debilitating for a struggling property or one without reserves, possible alternatives include required BPS compliance educational sessions, delayed building permit applications until compliance requirements are met, or a deduction in points when competing for the 9% LIHTC. There was broad agreement that financial penalties must go directly and completely to a BPS trust fund, green bank, or other centralized financial institution dedicated to this policy.

8. Require efficiency and pre-electrification measures, but delay electrification requirements until cost-effective for affordable housing.

Ed Connelly, President and CEO of New Ecology, a nonprofit specializing in sustainable consulting and affordable housing development, explained that after the EUI of a building is lowered through envelope and efficiency upgrades, it will plateau and electrification and renewables become the next steps. These are not without multiple, significant barriers. For many buildings, the initial major cost of upgrading electrical service to a building is unaffordable without planning. In most places, fuel-switching is also currently financially infeasible because electricity supply is more expensive than natural gas. Brod said that in Massachusetts, electricity costs about five times that of natural gas, so the additional financial burden of the increased operating costs can be difficult to accommodate. He recommended distressed properties first be allowed to focus on efficiency measures to decrease operating costs and that municipalities explore ways to subsidize increased operating costs and electricity rates. There is also a gap in technical knowledge with electric systems, so fewer technicians know how to service them and may charge more to do so, possibly affecting maintenance costs. While efficiency and pre-electrification measures should be required, there must be capital subsidies and/or timeline flexibility provided if electrification is required before it becomes more mainstream and affordable.

Appendix B: Stakeholder Interviewees

1. **Maria Quinones** (Elevate) City of Chicago Benchmarking Program
2. **Ed Connelly** (New Ecology) President and CEO
3. **Katie Elmore** (Community Investment Corporation) Program Manager: Energy Efficiency and New Business
4. **Marcy Huttas** (Neighborhood Housing Services) Business Process Improvement Manager/Senior Program Analyst
5. **Stacie Young** (Community Investment Corporation) President and CEO
6. **Katrina Managan, Sharon Jaye** (City and County of Denver) Director of Buildings and Homes and Energize Denver Policy Manager, respectively.
7. **Cliff Pouppirt** (Westside Housing) Real Estate and Construction Manager
8. **John Bartlett** (Metropolitan Tenants Organization) Executive Director
9. **Lauren Westmoreland** (Stewards of Affordable Housing for the Future) VP of Energy & Sustainability
10. **Todd Nedwick** (National Housing Trust) Senior Director of Sustainability Policy
11. **Krista Egger** (Enterprise) VP of Initiatives
12. **Michael Brod** (Jonathan Rose Companies) Sustainability Project Manager
13. **Charlene Andreas** (Latin United Community Housing Association) Director of Affordable Housing

Focus Group Participants

1. **Joseph Lopez**, Spanish Coalition for Housing
2. **Angela Hurlock**, Claretian Associates
3. **Sandy Barnard**, Lawyer's Committee for Better Housing

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