

Energy Upgrade Risk Mitigation

Four strategies to safeguard affordability, tenants, and the broader community

Jon Meyers, HR&A Advisors
Hannah Glosser, HR&A Advisors
Anna Gallicchio, HR&A Advisors

Matthew Rivas, HR&A Advisors
Amelia Marcantonio-Fields, HR&A Advisors

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This resource was developed by HR&A Advisors, a member of the R2E2 coalition of organizations. Residential Retrofits for Energy Equity (R2E2) provides deep technical assistance to state, local, and tribal governments as well as community-based organizations to jump start energy upgrades for single-family and multifamily affordable housing, especially in frontline communities. R2E2 is a partnership of the American Council for an Energy-Efficient Economy (ACEEE), Elevate, Emerald Cities Collaborative, and HR&A Advisors.



Introduction and Resource Overview

Introduction

Energy upgrades are a key component of climate resilience, energy use reduction, energy affordability, and the health and safety of occupants. In addition to these benefits, they also carry risks: without safeguards, they can increase costs, disrupt lives, and lead to residents being displaced from their homes. Through R2E2's work with program administrators, it is clear that they are grappling with:

1. identifying the unintended risks that energy upgrades may pose to occupants, owners, and communities,
2. maintaining occupant safety and affordability in the near- and long-term,
3. promoting building owner participation in programs, and
4. providing multiple benefits to communities in the areas surrounding upgraded buildings.

This resource offers guidance on how to approach these issues and includes a select set of strategies to help anticipate and mitigate risks. Each section explores the practical application of a strategy and identifies key areas for consideration to support its successful implementation.

Selected Strategies

Across the country, **energy upgrade programs help lower energy costs, decarbonize buildings, and improve health and quality of life** for building owners and occupants.

However, the work of these programs may create **unintended risks to building owners, occupants, and the surrounding community**, including high upfront costs for owners, disruptions to occupants, long-term energy cost increases, and housing displacement.

The strategies in this resource will help programs **identify and mitigate these risks through thoughtful partnerships and program design.**

Selected Strategies:

1. **Implementing affordability covenants**
2. **Establishing a tenant habitability plan**
3. **Implementing a community accountability plan**
4. **Minimizing pass-through costs**

Resource Overview

This resource is intended to serve as a briefing book and is divided into four sections, one for each strategy. Each section includes an overview of the strategy and case studies showcasing best practices for its implementation.

For each strategy, this resource provides:

- 1. Definitions**
- 2. Benefits and Challenges**
- 3. Implementation Considerations**
- 4. Case Studies**

Strategy

Case Studies

Implementing affordability covenants

Philadelphia Housing Development Corporation Rental Improvement Fund

Establishing a tenant habitability plan

Los Angeles Tenant Habitability Initiative

Implementing a community accountability plan

Union Square Community Benefits Agreement – Somerville, MA

Minimizing pass-through costs

Illinois Solar for All
Nevada's Energy Assistance Program
Northeast Energy Efficiency Partnerships (NEEP) Guidebook

Resource Overview

Risk mitigation strategies are not mutually exclusive. To minimize risk effectively, programs should consider implementing multiple strategies that address risk at different scales.

Strategies to consider implementing together

	Implementing affordability covenants	Establishing a tenant habitability plan	Implementing a community accountability plan	Minimizing pass-through costs
Implementing affordability covenants		✓	✓	✓
Establishing a tenant habitability plan	✓		✓	
Implementing a community accountability plan	✓	✓		✓
Minimizing pass-through costs	✓		✓	



Implementing Affordability Covenants

Implementing Affordability Covenants

What is an affordability covenant?

An affordability covenant is a formal agreement to maintain or extend the affordability of a property for a set period of time. This is typically an agreement between a building owner and a local public regulatory authority but can be arranged between a building owner and an energy upgrade program as well.

Implementer: Local public regulatory authorities, energy upgrade program administrators, weatherization program administrators, utilities

Why do they exist?

- The cost of operating a property may increase following an energy upgrade, either through higher debt service, higher utility bills due to new equipment, or through higher property taxes that reflect the property's higher value. Alternatively, building owners may simply choose to charge higher rents following an upgrade because the property is now more desirable.
- **Without an affordability covenant, these increased costs may be passed on to building occupants**, who may no longer be able to afford to stay in the property. Governments and program administrators implement covenants to protect their investments and make sure that they continue to benefit low-income households. It is critical to get the buy-in of building occupants and to address any concerns they may have about potentially incurring higher costs after upgrade work is completed.

Definitions

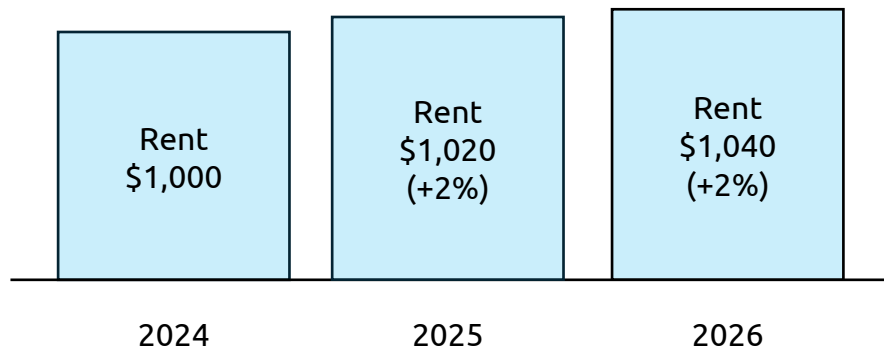
Implementing Affordability Covenants

Affordability covenants typically contain a rent stabilization agreement and/or affordability restrictions.

Rent Stabilization:

Agreement between an energy upgrade program and property owner to restrict the rate at which rents can be increased over a set period of time. In the example below, rent increases are limited to no more than two percent per year for three years.

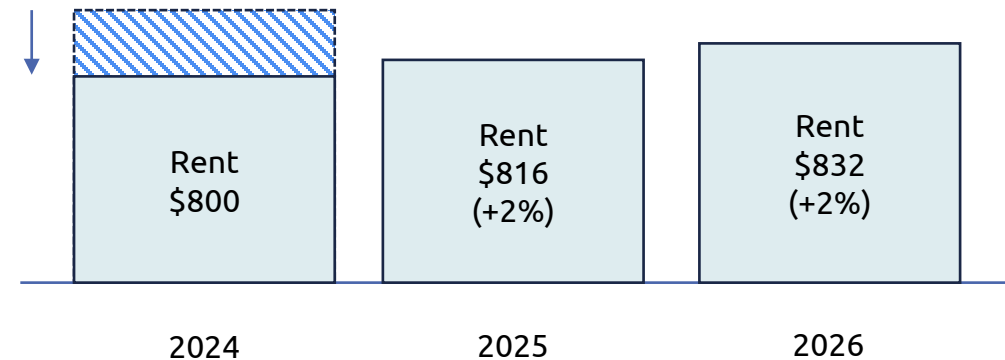
Rent Stabilization Example



Affordability Restrictions:

An agreement between an energy upgrade program and a property owner to restrict rents to a specified affordability level over a set period. These restrictions are typically tied to limited growth rates for fair market rents. In the example below, rents are lowered to be affordable at 80% of the Area Median Income (AMI), which is the midpoint of a region's income distribution for each household size, in the initial year, and rents are limited to grow no more than 2% per year for three years.

Affordability and Rent Stabilization Example



Implementing Affordability Covenants

Benefits

- Affordability covenants ensure ongoing affordability for building occupants with clear metrics and can reduce displacement risk.
- These covenants can increase occupants' enthusiasm about their landlords' participation in energy upgrade programs by preserving long-term affordability and protecting against higher costs of living.

Challenges

- Requiring building owners to restrict future cash flow opportunities may reduce their willingness to participate in the program.
- Enforcing affordability compliance requires administrative capacity. It may be challenging for an energy upgrade program to enforce the covenant without a strong enforcement entity.
- Addressing violations may involve a lengthy reimbursement or legal process, which can delay relief for tenants.

Implementing Affordability Covenants

What is the right duration/depth of affordability?

Two critical design components for affordability covenants are the **depth of affordability** required and the **time period** of restrictions.

- **Depth of affordability:** For rent stabilization restrictions, the depth of affordability is the extent to which rent can increase over a set period of time. For affordability restrictions, it is the initial affordability level to which rents are restricted, plus the extent to which rent can increase over time. Affordability levels are typically chosen as a rent affordable to a household making a certain percentage of the Area Median Income.
- **Time period of restriction:** The time period of the affordability restriction is the duration of the covenant, after which building owners may choose to increase rents as they wish.

When designing an energy upgrade program, it is important to consider these two variables, and how the depth and duration of affordability compare to the depth of public subsidy, which could be inclusive of incentives, provided to pay for the upfront cost of the energy upgrade and support affordability. The more money offered per unit to pay for upgrades, the more duration and depth of affordability can be requested. While it is important to maximize the affordability of the building to its occupants, an affordability covenant that does not pencil out for the building owner will reduce an owner's ability to participate in the program.

Implementing Affordability Covenants

Who is accountable for compliance?

Covenants are only as good as their compliance. While non-legally binding covenants are feasible in some cases, they may not be as effective in protecting tenants. Well-designed covenants will have a compliance structure in place to audit properties to ensure covenants are followed, create a process for tenants to report non-compliance, and potentially implement penalties for non-compliance.

Enforcing compliance with a public partner

- Having a public partner allows an energy upgrade program to leverage existing administrative and legal infrastructure, facilitating easier tracking and enforcement of affordability covenant compliance.

Enforcing compliance without a public partner

- While it may be more difficult to track and enforce, requiring building owners to sign an affordability requirement still highlights affordability as a priority of the energy upgrade program and can be used to hold owners publicly accountable.
- A robust communication infrastructure can help ensure that occupants are able to easily report rent increase violations to the energy upgrade program.

Implementing Affordability Covenants

What is the cost and who is covering it?

Implementing rent growth and affordability restrictions comes with a cost.

- The cost of implementing **rent stabilization** is the **net present value of the future loss** in potential rental income increases.
- The cost of implementing **affordability restrictions** includes a **current reduction in rental income, as well as the net present value of future income losses**.

While rental income is reduced, the cost of operating the building is not. Public subsidy can cover this funding gap and support greater building owner participation.

What are possible subsidy sources?

Some level of subsidy should be considered to increase building owner and tenant participation. Programs should consider how the timing and their control over different funding impacts participation.

- **Forgivable loans:** a payment intended to be repaid with or without interest over time. These may be forgiven if a building owner meets the loan terms, which may include an affordability covenant.
- **Grants:** a payment not intended to be repaid, but that may not cover the full cost of maintaining the duration of the affordability covenant.
- **Rebates:** a refund or credit for costs incurred by building owners or tenants after the fact.
- **Abatements:** agreement with a local government to reduce/eliminate future tax obligations owed for a period by building owners.

Implementing Affordability Covenants

What is the building typology?

The type of building and who owns it impact the feasibility of implementation.

- **For smaller buildings (<10 units),** there are typically fewer funding sources to cover the “cost” of lost income from affordability covenants. Owners may be hesitant to undergo a time-consuming and costly process for a few units.
- **For larger residential buildings (10+ units),** there are some funding sources to cover the “cost” of lost income from affordability covenants. Due to economies of scale, owners are typically more likely to comply with affordability covenants that apply to multiple units.

Are there existing subsidies/rental covenants?

In buildings with existing subsidies, where affordability requirements are already in place for units, extending rent stabilization or affordability restrictions is easier to implement because owners are familiar with, or already adhere to, the reporting requirements commonly associated with these restrictions.

In buildings without existing subsidies, owners may be more hesitant to join affordability covenants. They may not have the capacity to meet reporting requirements if they are too complex and difficult to comply with, or may be concerned about the level of cost, effort, and complexity required to implement them.

Case Study

Implementing Affordability Covenants

Philadelphia Housing Development Corporation Rental Improvement Fund

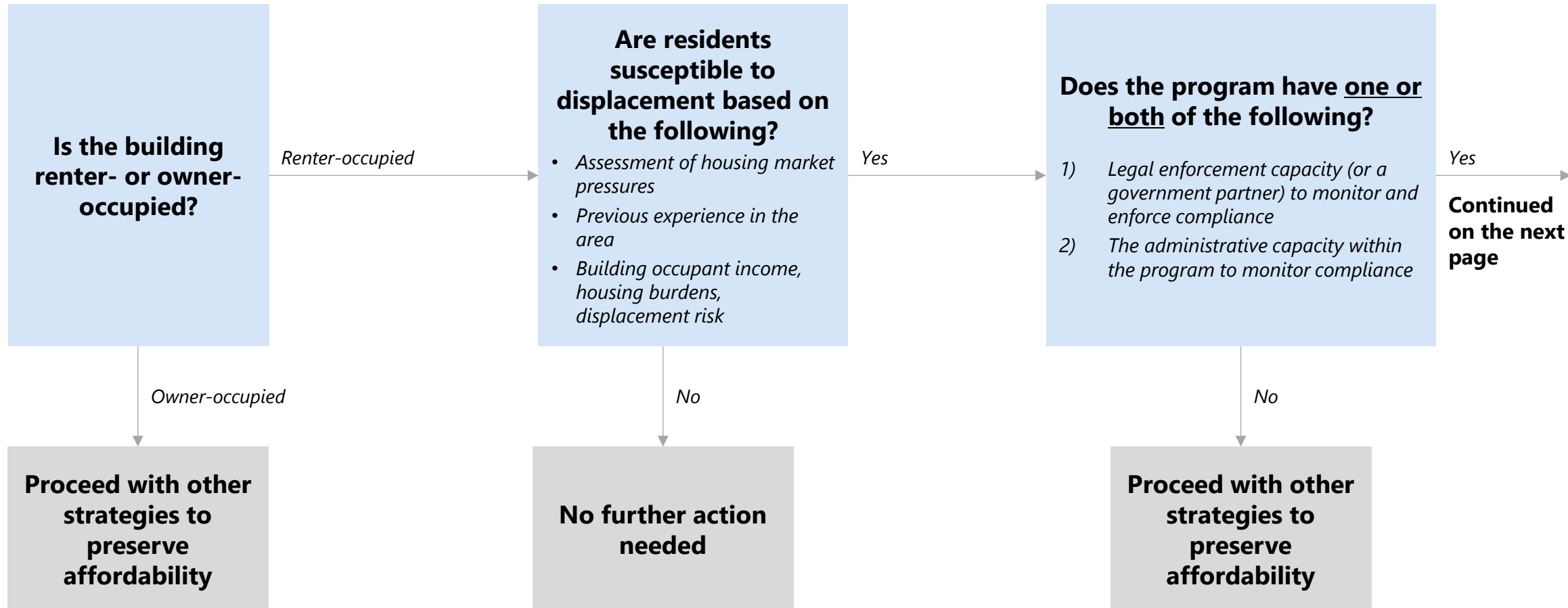
- This program provides loans to small landlords (<15 units) to repair their rental properties. Loans can range from \$10,000-\$24,999 per property and have 10-year terms.
- The Philadelphia Housing Development Corporation monitors compliance with affordability requirements.
 - If a project is in compliance (i.e., affordable rents are kept in place), the loan is deferred and will be forgiven 20% annually beginning in year six. If a project is not in compliance, the loan will assume a 6% interest rate.
- The program requires current rents to be affordable to households earning at or under 60% of Area Median Income and caps annual rent increases at 3%.
- Additionally, current renters must have three-year good cause eviction protection, which protects tenants from unfair evictions, retaliatory rent increases, and discriminatory evictions.



Source: WHYY

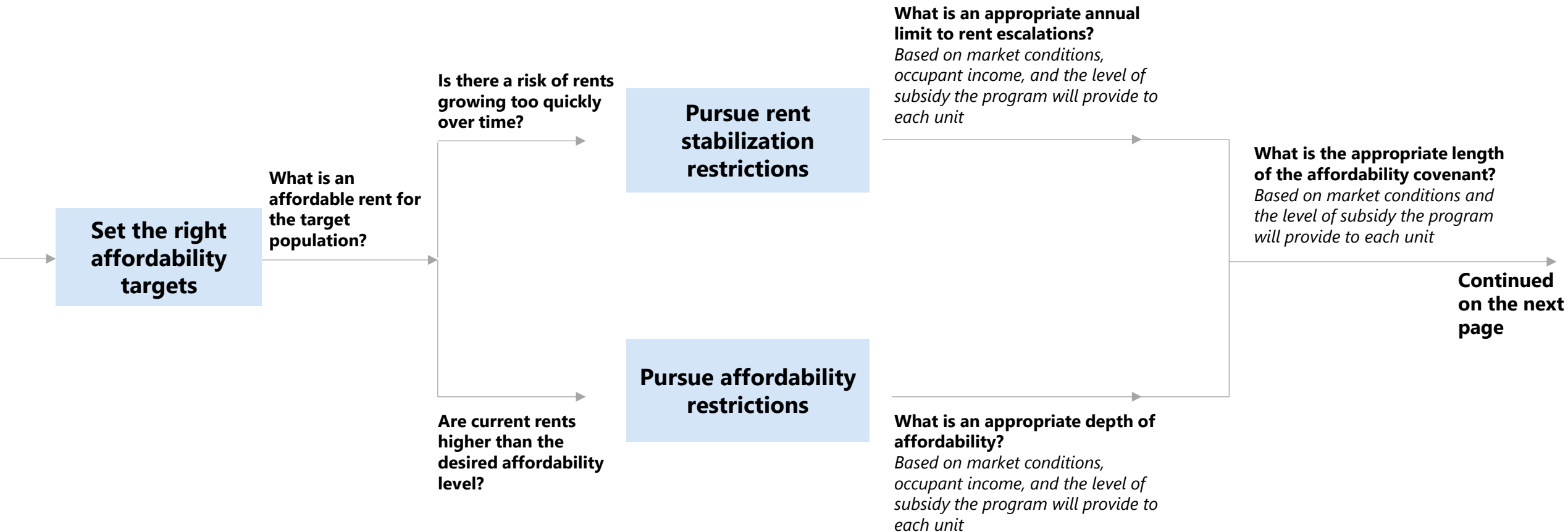
Guide to Implementing Affordability Covenants

This visual is intended to guide program administrators through the evaluation of feasibility, structure, depth, timeframe, and implementation considerations of affordability covenants.



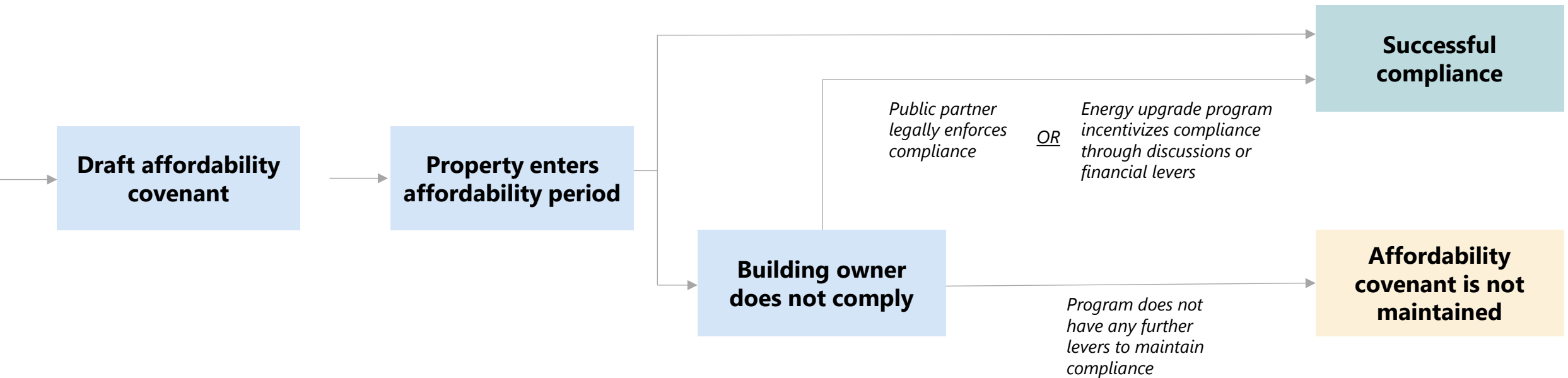
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Implementing Tenant Habitability Plans

Definitions

Implementing Tenant Habitability Plans

What is a tenant habitability plan?

A tenant habitability plan (a plan to minimize disruption during an upgrade) is a document that describes the work to be undertaken during an energy upgrade and how it might impact the quality of life of occupants, including potentially hazardous building materials, site conditions, noise disruptions, and other disruptions. A habitability plan typically includes strategies for mitigating these negative impacts, such as adjusting work hours to accommodate occupants' schedules, implementing site safety plans, and possibly providing temporary tenant relocation and compensation.

Implementer: Energy upgrade program administrators, building owners

Why do they exist?

- Building occupants can be impacted by upgrade work in numerous ways. For limited-scale upgrades, occupants may need to temporarily adjust their daily routines to accommodate the project. They may experience disruptions due to noise and the presence of workers in their living or working space. For larger-scale upgrade work, occupants may also be exposed to hazardous materials and construction conditions, potentially requiring their temporary relocation.
- Tenant habitability plans seek to provide occupants with as much information as possible in advance of upgrade work. If substantial accommodations are needed for occupants, these plans outline how those services will be provided and how tenants will be compensated.

Implementing Tenant Habitability Plans

Benefits

- Establishes clear expectations for building occupants and holds all parties accountable.
- Creates a pathway for building occupants to file complaints and have concerns addressed.
- Can combat landlord harassment or neglect and help formalize occupant rights that may otherwise continue to exist as an informal agreement.
- For commercial occupants, these agreements allow time to plan for disruptions that may impact business.

Challenges

- Creating a tenant habitability plan requires an understanding of how building occupants use a building and how they may be impacted by upgrade work. This can pose an additional administrative burden on programs to craft a plan, on building owners to demonstrate compliance, and on program administrators to ensure ongoing compliance. This may discourage building owners from participating.
- Construction is unpredictable, so even a thoughtful plan may end up being wrong, sowing mistrust and frustration if plans are too specific.

Implementing Tenant Habitability Plans

What is the energy upgrade program's capacity to create and enforce the plan?

Creating an effective tenant habitability plan requires an understanding of how the building is used, at what times, and by whom, so that building owners can effectively mitigate adverse impacts on tenants. Programs should help participants to structure plans that achieve the following best practices:

- **Collaborate with occupants to the maximum extent possible** to understand how health, safety, and economic opportunities will be impacted by energy upgrade work. In single-occupant buildings and buildings with commercial occupants, this can begin during an initial energy assessment. In multifamily buildings, programs should discuss occupant needs with representatives (property managers, building tenant associations, or local community-based organizations representing tenants' rights) in addition to building owners.
- **Establish a clear system for occupants to file complaints and implement a process** to hold building owners accountable for providing a safe and livable environment.
- Outline a methodology for **quality assurance/quality control (QA/QC) inspection** after work ends.
 - See the Pacific Northwest National Laboratory's [Quality Install Tool](#) as an example resource.

Implementing Tenant Habitability Plans

How does the scale of upgrade work impact the habitability plan?

The plan design should be adapted to the scale of the planned energy upgrade work.

- **For upgrades that include limited measures,** plans should clearly disclose the planned work, the reasons for undertaking it, the expected work hours, and any potential hazards. Programs should also consider if the scale of work warrants a habitability plan.
- **For extensive upgrades,** plans should also seek to minimize disruption to occupant schedules to the extent possible, consider temporary tenant relocation plans, specify measures to protect personal property, coordinate with local housing and service providers as needed, and provide necessary compensation to tenants for relocation costs or any resulting damages.

The **Los Angeles Tenant Habitability Plan** stipulates *"A landlord shall pay for all temporary housing accommodation costs and any costs related to relocating the tenant to temporary housing accommodations, regardless of whether those costs exceed rent paid by the tenant. The landlord shall also pay any costs related to returning the tenant to the tenant's unit, if applicable."*

Implementing Tenant Habitability Plans

What is the building typology?

The building's size and ownership impact components of the habitability plan.

- **For smaller buildings (<10 units),** programs could consider habitability plans individualized to each household's (or business's) schedule and unique needs.
- **For larger residential buildings (10+ units),** habitability plans should consider how upgrade work will impact common areas and may consider phasing work in building sections. In the event of temporary displacement, programs should consider collaborating with local housing and service providers.

What is the local context?

Energy upgrade programs should connect tenant habitability plan requirements with local requirements to the extent possible, especially if the local jurisdiction requires development projects to include some degree of financial or technical support to displaced occupants.

For example, [Los Angeles's Tenant Habitability Program](#) requires upgrades to residential buildings subject to the city's Rent Stabilization Ordinance to provide a tenant habitability plan that discloses the work to be done and the steps to be taken to protect tenants' safety and property.

Case Study

Implementing Tenant Habitability Plans

Los Angeles Tenant Habitability Initiative

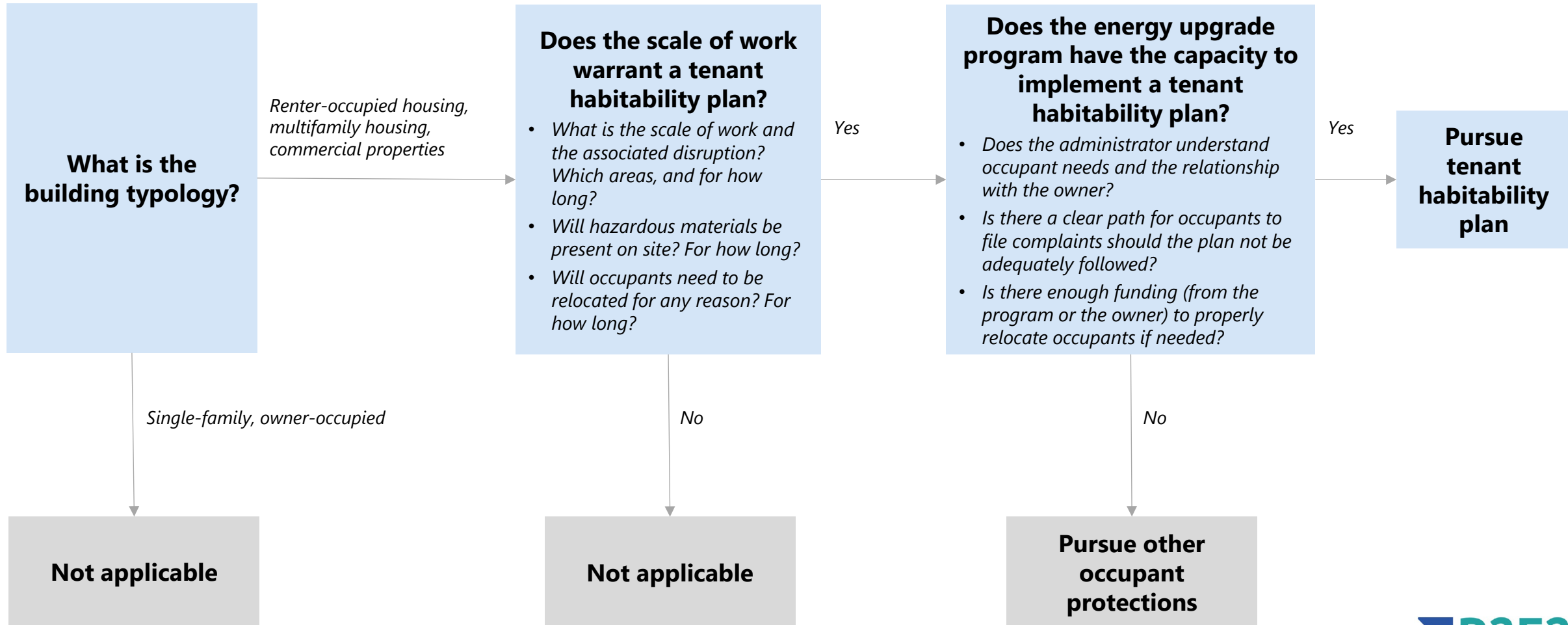
- This program requires owners to disclose the potential disruptions they will need to make during a building renovation.
- It applies to most residential properties protected under the city's Rent Stabilization Ordinance.
- The requirement is designed to mitigate the impact on tenants during water/gas line replacement, re-wiring, HVAC replacement, and more.
- The plan must disclose:
 - The scope of work, estimated cost, and time associated with the upgrade.
 - Any impact on noise, utility interruption, exposure to hazardous materials, and accessibility disruptions.
 - Mitigation measures that will be taken to ensure that tenants will occupy a safe dwelling during work.



Source: Los Angeles Housing Department, Photo by Mark Burge is licensed under [CC BY 2.0](#)

Guide to Implementing Tenant Habitability Plans

This visual is intended to help program administrators consider the need for, and feasibility of, creating and implementing a tenant habitability plan.





Implementing Community Accountability Plans

Definitions

Implementing Community Accountability Plans

What is a Community Accountability Plan?

Community accountability plans (CAPs), also known as community benefits agreements (CBAs), are agreements typically negotiated between a project developer (e.g., building owner), community representatives, and a government/community facilitator (e.g., an energy upgrade program). The developer typically agrees to fund specific programs or adapt building program/design in a way that benefits local communities. These agreements can be legally binding.

Implementer: Energy upgrade program administrators, building owners, community representatives

Why do they exist?

- There are numerous ways in which the communities surrounding upgrade projects might benefit from energy upgrades, including the employment of local contractors, the utilization of local materials and suppliers, and ultimately using the completed building's amenities.
- Moreover, communities may seek ongoing commitments from developers or building owners to mitigate potential impacts that the newly renovated building might have, such as creating higher market rents in the surrounding neighborhood. Communities may also want to ensure that the *benefits* brought by new development continue to spill over into surrounding areas in the future.

Implementing Community Accountability Plans

Benefits

- Community accountability plans can provide additional benefits such as job creation and training, affordable housing, business support, amenities, etc., to communities impacted by new development and energy upgrades.
- Community accountability plans can increase goodwill and trust between building owners and communities and create agency over development in their neighborhoods.
- For commercial energy upgrades, community accountability plans can ensure rent affordability and stipulate the types of businesses that will be permitted to rent.

Challenges

- Community accountability plans are only successful if they include clear agreements with specific metrics of success, progress tracking, and, potentially, enforcement mechanisms.
- Program administrators must coordinate among parties with varying interests and incentives. The more ambitious the community accountability plan, the more time and resources are needed to negotiate and administer the agreement.
- A party must be responsible for ensuring benefits materialize over time, and the community accountability plan should include a provision for action in the case of a party violating the agreement.

Implementing Community Accountability Plans

What is the energy upgrade program's capacity to create and enforce a CAP?

Creating an effective community accountability plan requires cooperation among building owners, project developers, and community representatives. Programs pursuing a CAP should create a clear communications infrastructure among all parties and be prepared to adapt the workplans and designs of their upgrade work to meet community requests.

Programs should consider their capacity to achieve the following best practices:

- **Establish robust partnerships** with local community-based organizations (CBOs), government agencies (including state and local housing finance agencies), utilities, tenant associations, finance and lending institutions, affordable housing experts, workforce development organizations, and other interested entities so all relevant perspectives are heard and integrated.
- **Plan and budget for regular evaluation and adjustment** to ensure the program is making enough progress toward goals.
- **Establish processes for regularly reporting back** to engaged communities for transparency and accountability.
- **Post the plan publicly** to also support transparency and accountability.

Implementing Community Accountability Plans

What kind of project is right for a CAP?

Regardless of the scale of work at the building level, community accountability plans are focused on providing community-level benefits. Community accountability plans are most appropriate if the scale of planned work is sufficient to make a community-level impact.

- **For upgrades with a limited scale**, such as limited upgrades in a few units or in units that are geographically far apart, community accountability plans are harder to organize. Building owners may be more hesitant to agree to the process of creating and following a community accountability plan for a few units even if the required upgrade work is substantial. Programs and building owners may still consider how to use local labor, supplies, and green building practices.
- **For upgrades with a larger scale**, community accountability plans may be more appropriate given that the investment by the program in the buildings is substantial to building owners, occupants, and the surrounding community. Larger budgets and more impacted occupants provide a greater opportunity to include local labor, supplies, and green building practices while considering how to maintain long-term affordability, provide space for community organizations and retail, and collaborate with CBOs to provide occupants with services such as health programs and workforce development as needed.

Implementing Community Accountability Plans

What is the cost and who is covering it?

The cost of developing and implementing a community accountability plan is typically borne by the project developer or building owner.

- Labor, supplies, and green building practice agreements may result in an increase in upgrade costs to accommodate the cost of local procurement and higher quality construction/installation practices.
- Additional items, such as affordability agreements, expanded amenities, investment in community programs, and connecting occupants with services, will require funds from grants, forgivable loans, or incentives/rebates from public partners.

What is the local context?

- Energy upgrade programs and project developers interested in a community accountability plan can conduct outreach to local CBOs and community representatives willing to speak on workforce, economic, housing, and other conditions impacting residents in the area, or reach out to building occupants directly.
- Programs may consider using local contractors and suppliers to further generate economic benefits for the community.
- Programs can investigate any examples of past local community accountability plans, their successes, and lessons learned, adapting their community accountability plan accordingly.

Case Study

Implementing Community Accountability Plans

Project Labor Agreements (PLAs)

- A type of CAP, PLAs are agreements between energy upgrade programs, building owners, project contractors, and labor representatives that establish requirements for local labor targets and minimum procurement of minority- and women-owned businesses (MWBES).

Example: Boston Housing Authority Energy Efficiency Upgrades

- The city upgraded 13 public housing properties, comprising 4,300 units, with water conservation measures, energy-efficient lighting, decentralization of aging heating and hot water systems, and more.
- The PLA created 600 jobs for “local union workers, public housing and low-income city residents, and small and minority-owned businesses.”
- A unique pre-apprenticeship program was also developed, allowing public housing and very low-income residents to participate in training and secure confirmed enrollment in apprenticeship opportunities.



Source: Boston Housing Authority

Considerations for Implementing Community Accountability Plans

This visual summarizes the key questions program administrators should ask at each step in pursuing a CAP.

Assess Demand

Has engagement with local nonprofits, community leaders, or other representatives from the area indicated a desire for a formal community benefits and accountability plan from energy upgrade programs and building owners?



Fit CAP to Project Scale

Small scale

- Can the energy upgrade program or building owner commit to using local labor, supplies, green building practices, or other commitments?

Larger scale

- Does the energy upgrade program or building owner have the administrative and financial resources to commit to affordability agreements, expanded amenities, investment in community programs, or connecting occupants with services?



Funding and Accountability

- What funding sources, subsidies, and/or incentives exist locally and federally to offset the cost of committing to small- or large-scale CAPs?
- What metrics of success will be set for the energy upgrade program and building owner?
- Who will hold them to these metrics? And for how long?



Minimizing Pass-through Costs

Definitions

Minimizing Pass-through Costs

What are pass-through costs?

Pass-through costs are costs incurred by building owners, such as new debt service, higher property taxes, utility costs, and other overhead costs that may increase following an energy upgrade, that are then passed on to building occupants. While implementing an affordability covenant could be a way to reduce pass-through costs, the following strategies differ in that they seek to reduce the factors upstream that impact building owners and that might lead to rent or other housing cost increases.

Implementer: Local government authority or utility, energy upgrade program administrators

Why do pass-through costs exist?

- Costs that increase following an energy upgrade leave building owners with the decision of whether to bear the costs themselves, find alternative ways to reduce these costs or pay for them, or pass them on to building occupants (if applicable) in the form of higher rent and other charges.

How can pass-through costs be minimized?

- There are several strategies to address pass-through costs, including building and program design, education, and rebates or abatements.

Minimizing Pass-through Costs

Benefits

- Protecting building owners and occupants from bearing these additional charges ensures the benefits from the energy upgrade are not outweighed by the costs.
- Protects affordability for building occupants and reduces their risk of displacement following energy upgrades.
- Provides an opportunity for programs to strengthen local partnerships with building owners, subsidy programs, and regulatory agencies.
- Property tax abatement/forgiveness may be used to incentivize the creation/addition of desired building amenities that benefit the greater community.

Challenges

- If any ongoing increased costs (not outweighed by benefits or savings) are borne by building owners, this disincentivizes their participation and willingness to install more efficient (and potentially expensive) appliances.
- Efforts to reduce or eliminate the causes and effects of pass-through costs increase the administrative burden on energy upgrade programs and their partners.
- For a tax abatement, there is foregone tax revenue to the municipality. A tax abatement should be structured to ensure it is commensurate with the cost to implement and is paired with monitoring to ensure compliance.

Minimizing Pass-through Costs

How can pass-through costs be identified?

Identifying which pass-through costs exist and can be mitigated begins with the following best practices:

Existing or new debt service

- Understand if the building owner has taken on debt to contribute to the energy upgrade and what terms the debt comes with.

Increased utility costs

- Understand who typically pays utility bills and how utility costs may be impacted by the installation of electric equipment and other upgrade work.
 - Consult utility companies and publicly-accessible utility data, along with local community feedback.

Increased property taxes

- Develop an understanding of how property taxes have historically been impacted by building improvements.
 - Consult local taxing authorities and public property records along with local community feedback.

Minimizing Pass-through Costs

What are examples of minimizing pass-through costs?

Energy upgrade programs have several options to mitigate pass-through costs once they are identified.

Building and program design

- Pair installation of electric heating and cooling equipment and building envelope upgrades with onsite generation to help ensure that energy bills do not increase. In most cases, comprehensive upgrades will lead to reduced energy consumption. Include passive strategies for reducing energy costs, including shading, green roofs, and cool roofs.

Education

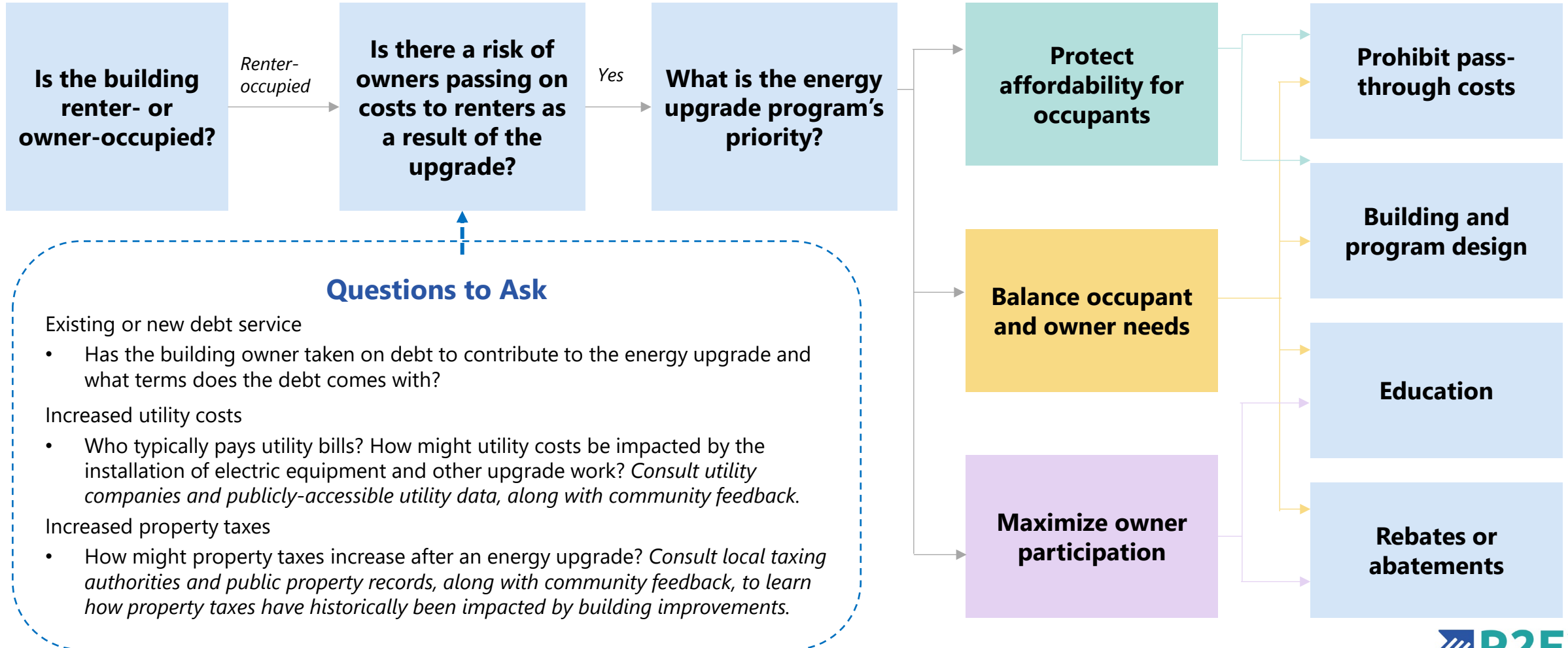
- Provide education to building owners, property managers, and occupants on how to control energy costs. Develop informational materials and provide one-on-one walkthroughs of energy-saving practices following upgrade work.

Rebates and abatements

- Ensure the program coordinates with existing programs provided by utilities, nonprofits, and local/state governments to reduce both upfront costs and post-upgrade costs. Connect building owners and occupants with subsidies such as utility bill reduction programs, rebates, or, for commercial occupants, small business support programs.
- Energy upgrade programs can work with local authorities to implement a property tax abatement, which reduces or eliminates property taxes owed for a building for a specified time period, offsetting any higher costs and incentivizing program uptake.

Considerations for Minimizing Pass-through Costs

This visual is intended to help program administrators identify, prioritize, and select the right combination of strategies to mitigate pass-through costs for their programs.



Case Study

Minimizing Pass-through Costs

Energy upgrade programs can pair qualified building owners with programs that reduce the costs of installation and operation of new electric appliances and equipment.

Illinois Solar for All, an initiative of the Illinois Power Agency, enables households that otherwise could not afford solar to take advantage of the benefits it provides, including offsetting any cost increases that may result from installation of electric equipment. The initiative also controls the cost the property owner pays for the solar system, by ensuring ongoing costs of the solar installation do not exceed 50% of the value of power generated by the solar photovoltaic systems.



Source: U.S. Department of Energy

Case Study

Minimizing Pass-through Costs

Another method to reduce pass-through costs is connecting qualified building owners with existing bill payment assistance programs.

Nevada's Energy Assistance Program provides income-eligible households with a Fixed Annual Credit (FAC) benefit that is calculated for each program participant. The FAC is determined by calculating the amount of money the household spends on utility bills above the level which a typical household of that size in Nevada pays. The FAC reduces the energy burden of participating households to the statewide median household energy burden.



Source: Nevada Current

Case Study

Minimizing Pass-through Costs

Changes in behavior can reduce energy costs for owners and occupants.

Northeast Energy Efficiency Partnerships (NEEP) has prepared a guidebook for renters that provides questions to ask landlords and building owners regarding the energy efficiency of their building's envelope and appliances. The guide also provides tips for practices renters can use to keep energy costs lower.



A Guide for Renting and Creating Lower Cost Energy Efficient Apartments and Homes

Nearly all renters pay their own energy bills, but few have options relating to the efficiency and quality of the heating and cooling systems, appliances, and windows of their rental. However, there are many steps renters can take to save and manage energy. Just because you don't own your home doesn't mean comfort, energy and cost savings cannot be achieved.

What to Ask and Look for Before Renting

Saving money and energy can be easy if you know what to look for. Thoroughly investigate the many energy use aspects of a potential rental before you sign a lease.

Energy spending per square foot in rented apartments can run 76 percent higher than in owner-occupied single family homes.¹

Looking for a rental property? A few key indicators can help you assess the efficiency of the rental. Below is information on “What to Look For”, and a checklist of features to investigate “Before You Sign” when touring a potential new home or apartment. The checklist will assist you in understanding the amount of energy you may use and ultimately pay for.

Looking to cut energy bills in your current rental? It's natural to think that it's not worthwhile to invest in energy efficiency improvements if you don't own your home. However, there are steps you can take that pay off within a year or two and improvements that you can also bring with you to your next home. Use the “Simple Low-Cost and No-Cost Measures” and “Utility Program Offerings” sections at the end of this guide to reduce your bills quickly.



- Insulation
- Utility Costs
- Meter Info
- HVAC Systems
- Water Heating
- Thermostat Control
- Appliances
- Draftiness
- Windows

Source: Northeast Energy Efficiency Partnerships

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