Equitable Approaches to Building Performance Standards
Completed July 2022
What is a Building Performance Standard?

A Building Performance Standard (BPS) establishes targets for buildings to reduce energy use, greenhouse gas (GHG) emissions, or other metrics over time.

Successful and equitable policies must include substantial investment in supportive programs for buildings, the local workforce, and historically underserved populations.

These targets are typically meant to:

- Funding for upgrades in low-income housing
- Technical assistance for under-resourced building owners
- Workforce training and support
- High-road employer requirements

Image Source: American Cities Climate Challenge, Building Performance Standards: A Framework for Equitable Policies to Address Existing Buildings
Why Create Policies for Existing Buildings?

- Buildings cause public health and safety hazards from air pollution, poor-quality construction, and maintenance deficiencies.

- Buildings contribute substantially to climate change, accounting for up to 70% of GHG emissions in some U.S. cities.

- The current pace of energy improvements in U.S. buildings is inadequate to reach climate goals. Roughly 2% of commercial buildings and less than 0.3% of multifamily buildings are upgraded annually.*

*Source: Analysis by Architecture2030 using data from the International Energy Agency
**Building Performance Standards in U.S. Cities**

- **New York City, NY**
  - **Building Size:** >25,000 sq. ft.
  - **Building Types:** Commercial and Multifamily
  - **Metric:** GHG emissions per sq. ft.; separate prescriptive measures for affordable housing
  - **Compliance Timeline:** Targets set every 5 years between 2025-2050

- **Washington, DC**
  - **Building Size:** >10,000 sq. ft.
  - **Building Types:** Commercial and Multifamily
  - **Metric:** Options of site EUI per sq. ft., ENERGY STAR, prescriptive pathway, or alternative compliance pathways
  - **Compliance Timeline:** Targets set every 6 years beginning in 2021

- **Denver, CO**
  - **Building Size:** >25,000 sq. ft.
  - **Building Types:** Commercial and Multifamily
  - **Metric:** Site EUI per sq. ft. plus addl. electrification requirements at time of appliance replacement
  - **Compliance Timeline:** Targets set every 3 years between 2023-2030

- **Boston, MA**
  - **Building Size:** >20,000 sq. ft.
  - **Building Types:** Commercial and Multifamily
  - **Metric:** GHG emissions per sq. ft., plus alternative compliance pathways
  - **Compliance Timeline:** Targets set every 5 years between 2025-2050

- **St. Louis, MO**
  - **Building Size:** >50,000 sq. ft.
  - **Building Types:** Commercial and Multifamily
  - **Metric:** Site EUI per sq. ft.

*U.S. cities with building performance standards as of July 2022*
What Are the Equity Opportunities of a BPS?

- **High-road jobs and economic opportunities** for historically marginalized populations
- **Reduced housing and energy costs**, provided there are protections for low-income residents and tenants
- **Health, safety, comfort, and resiliency benefits** that could be delivered to those who need them most
What Are Potential Equity Risks of a BPS?

- Housing/rental cost increases
- Energy bill increases
- Tenant harassment/displacement
- Long-term gentrification and displacement
- Pushing smaller landlords out of business
- Lack of community trust and buy-in

- Lack of opportunities for minority- and women-owned contracting firms
- Lack of opportunities for workers of color
- Inability to create family-sustaining jobs
- Benefits do not reach tenants or low-income communities

...and more
Spotlight: Housing and Affordability

At least 40% of renters are housing cost-burdened* in most metro areas across the U.S., and this share is rapidly increasing in many parts of the country.

Image Source: Harvard University, Joint Center for Housing Studies

*Renters that are housing cost-burdened are defined as those paying more than 30% of income on rent and utilities.

**Low-rent housing stock is defined as units with rents under $600 in 2019 dollars.
Spotlight: Housing and Affordability

Buildings subject to a BPS may be already be unaffordable to residents or may face threats to continued affordability.

- For example, a significant number of large buildings subject to a BPS in Boston are also home to residents facing high rent burdens.

First Image Source: Boston Displacement Mapping Project
Second Image Source: City of Boston BERDO database
Spotlight: Housing and Affordability

The potential rental housing impacts of a BPS could include:

- **Increased rents** if the building owner chooses to pass on the costs of upgrades to tenants.
- **New or higher utility costs** depending on specific upgrades and how owners choose to set up energy meters.
- **Displacement of tenants and/or unfair evictions** during the construction process.
- **Additional upward market pressure** on rents due to improved amenities.

### Example Costs and Potential Rent Increase
Retrofit to All-electric Building over 30 years (Northeast Climate)

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Total Installed Cost</th>
<th>Lifetime Bill Savings</th>
<th>Potential Rent Increase</th>
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<tbody>
<tr>
<td>Multifamily Building, High Energy User</td>
<td>$4.8M</td>
<td>$1.4M</td>
<td>$50-$250 per unit per month</td>
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<tr>
<td>Multifamily Building, Low Energy User</td>
<td>$1.6M</td>
<td>No savings</td>
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</tbody>
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*Source: Internal BEI Analysis

Depending on how a landlord decides to recoup the costs of a major building upgrade, they may choose to increase the rent by anywhere from $50 to $250 per month.*
Steps for Developing an Equitable BPS

The following steps are based on BEI’s work with cities on equitable BPS policies:

1. Engage in co-creation with communities, prioritizing those that have been historically marginalized and who are typically left out of the policymaking process.

2. Assess the benefits and burdens of the potential policy and work with community stakeholders to understand how these may intersect with existing needs and priorities.

3. Design and implement program and policy solutions that mitigate the burdens and maximize the benefits for historically marginalized communities.
Step 1: Co-creation with Communities

Community co-creation is a process of deep, iterative collaboration between government staff and leaders rooted in and accountable to historically marginalized communities.

The goal of community co-creation is to move from a position of ignoring or informing community stakeholders to a practice of involving, collaborating with, and eventually deferring to these stakeholders in the policy development process.

THE SPECTRUM OF COMMUNITY ENGAGEMENT TO OWNERSHIP

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<thead>
<tr>
<th>STANCE TOWARDS COMMUNITY</th>
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Image Source: Facilitating Power and Movement Strategy Center, *Spectrum of Community Engagement to Ownership*
Why Community Co-creation?

Community co-creation processes take time, flexibility, and patience. The result will be more effective and equitable policies.

A community co-creation process will help policymakers:

- **Gain critical expertise** from historically marginalized communities or groups that government staff often do not have.
- **Design the policy more effectively** to ensure it works for under-served communities who have been harmed by past government policies.
- **Build political support** for policies by allowing stakeholders to help design the approach.
- **Address social and racial inequities** that persist in local communities.
- **Develop new relationships based on mutual trust, respect, and shared power** that contribute to productive, long-term collaboration between local government and marginalized communities.
Who Should be Prioritized?

Community co-creation processes are designed to include people who:

- Could be affected by the potential policy.
- Are already burdened with existing inequities.
- Have been historically excluded from policymaking processes.

Priority audiences for a BPS include:

- Tenants
- Low-income residents
- Labor stakeholders and workers
- Women- and minority-owned contracting firms
- Unemployed or under-employed people
- Historically redlined communities
- Small businesses
- Nonprofits and places of worship
Boston invested in both technical stakeholder engagement and community co-creation to develop its BPS to ensure a robust policy structure and broad community support.

Technical Advisory Group Topics:
- Targets, typologies, and compliance pathways
- Economic analysis of costs and penalty options
- Other areas of concern, such as campuses, district systems, renewable energy credits (RECs), and offsets

Residential Advisory Group Topics:
- Benefits of electrification and building upgrades
- Community and tenant priorities and concerns
- Governance of an Equitable Emissions Investment Fund, including types of projects and criteria for funding
- Establishment of an Emissions Review Board that will be two-thirds community-appointed representatives
Step 2: Assess Benefits and Burdens

Work with stakeholders to assess the benefits and burdens of a BPS to identify intersections with community needs and priorities.

Questions to Answer with Community Stakeholders:
- Where does the BPS intersect with existing community priorities?
  - Ex. Local jobs, air quality, housing costs
- Where are the benefits of the BPS likely to go?
  - Ex. HVAC contractors, high income residents
- Who is likely to bear the burdens of the BPS?
  - Ex. Low-income tenants, small property owners

Best Practices for a Successful Process:
- Work deeply with community stakeholders to validate the assessment and findings
- Present technical discussions and considerations in an approachable way
- Acknowledge the harmful histories that have caused existing inequities
- Allow space for iteration, discussion, and debate
Example: In San José, a BPS would need to improve air quality in low-income communities in order to provide benefits to those who suffer the worst air pollution.

For Comparison: Low-income Distribution
**Example**: In Berkeley, a BPS must avoid exacerbating ongoing gentrification and displacement, which is disproportionately impacting African Americans.

**For Comparison: African American Population**

Source: Urban Displacement Project

Assess Benefits and Burdens | Berkeley Example
Step 3: Design & Implement Equitable Solutions

Based on a shared understanding of the potential benefits and burdens of a BPS, work with community stakeholders to identify equitable solutions.

**Examples of Equitable Solutions:**

- **Funding for upgrades**, particularly in low-income and under-resourced buildings
- **Technical assistance for building owners** to support policy compliance
- **Workforce and contractor support** to build the local workforce and improve job quality
- **Alternate compliance options**, such as deadline extensions and alternative or individualized compliance pathways for special building types
- **Co-creation of additional policies or programs** that may be necessary
Example: Denver Climate Protection Fund

Denver voters enacted a sales tax in 2020 to generate $40-50 million annually for a new Climate Protection Fund (CPF).

- A significant portion will go toward the building electrification incentive program to support compliance with the Energize Denver Ordinance.
- Denver is also committed to ongoing stakeholder engagement to continue identifying solutions to be funded by the CPF.

"...broad, frequent, and impactful education about new solutions must go hand-in-hand with implementation."
— Participant in the Climate Action Task Force public engagement process
Equitable Solutions | Technical Assistance

Example: NYC Accelerator

New York City launched the NYC Accelerator to provide free technical assistance services to help building owners comply with New York City’s Building Emissions Law. The NYC Accelerator is funded at roughly $10M per year for the first three years of operation.

Financial & Technical Assistance
Plan, finance, and complete building energy efficiency and renewable energy projects

Connect with Contractors
Find experienced and qualified contractors in your area

Understanding Local Laws
Assist building owners and operators to meet LL97 targets and other NYC laws

Access Incentives
Find incentive awards from local utilities and New York State to help you save costs

Trainings
Join an online training to improve your skills or learn something new

Build High Performance
Prepare for the future by building your next project to a High Performance standard
The goals for providing workforce and contractor support alongside a BPS can include:

- Ensuring there is a skilled workforce to meet the increased demand for building upgrades
- Improving the quality of new jobs created, including family-supporting wages and benefits
- Promoting more equitable access to new jobs and business opportunities for priority populations

With proactive government policy, there does not need to be a tradeoff between access to jobs and quality of jobs:

**Example: Portland Workforce & Contractor Investments**

The City of Portland has committed to investing more than $10 million over three years for equitable workforce and contractor development to support its future BPS.

**Portland’s commitment includes:**

- Building a network of community partners, training providers, businesses, and unions.
- Career coaching, support, training scholarships, job placement, and retention services for priority populations.
- Community-based pre-apprenticeship training programs.
- Pathways for low-income people of color and women to move into careers in skilled construction trades.
- Upskilling, training, and credentialing for existing unionized building workers.
- Culturally-specific, customized business development support, training, and advanced credentialing for minority contractors.

Source: Recommended Portfolio for Request for Proposals (RFP) #2 of the Portland Clean Energy Community Benefits Fund (PCEF)
Equitable Solutions | Compliance Options

Example: Boston’s policy structure includes built-in flexibility to accommodate multiple building types.

- Separate targets are set for 13 building typologies, with decreasing GHG emissions intensity targets every 5 years.

- Buildings can apply to follow an alternative “Individual Compliance Schedule,” with targets based on a percentage reduction from a baseline (50% by 2030 and 100% by 2050) to allow buildings to take action when it will be most cost effective.

- For under-resourced buildings, there is an option to provide individually proposed “Hardship Compliance Plans,” which must be approved by an Emissions Review Board made up of two-thirds community representatives.

- There is an additional option to pay an “Alternative Compliance Payment” of $234/ton CO2e/year over the compliance target that will help fund an Equitable Emissions Investment Fund that will provide funding for under-resourced buildings.
For more information on developing equitable building performance standards:

American Cities Climate Challenge
Framework on Building Performance Standards

Download at: https://www.usdn.org/projects/building-performance-standards.html