A Game-Changing Opportunity: Building Performance Standards

North American Insulation Manufacturers Association
June 25, 2021
About The Institute for Market Transformation (IMT)

Mission
Catalyze widespread and sustained demand for high-performing buildings.

How we work
Advancing policies and business practices that enable people to build and operate healthy, high-performing buildings.
Why Building Performance Standards?

- Buildings waste ~30% energy and role in decarbonizing energy supply is not defined by markets
- Current energy-related renovation rates: 2% of commercial buildings and <.5% of residential buildings
- Building performance standards make performance meaningful to business: shift from *a nice to have*
- BPS establish the role of buildings in decarbonizing energy supply

*Photo: Onion Flats, by Sam Oberter*
What Makes a BPS Different?

- Requires Improvement Across a Wide Range of Buildings
- Provides Comprehensive Approach to Performance
- Yields Deep Retrofits at Scale
- Balances Flexibility and Immediate Action
- Drives Private Value, Creating Investment in Private Buildings
- Sends Long-Term Signal
# BPS Around the United States

<table>
<thead>
<tr>
<th>Washington, DC</th>
<th>New York City</th>
<th>WA State</th>
<th>St. Louis, MO</th>
<th>Montgomery County</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year Adopted</strong></td>
<td>2019</td>
<td>2019</td>
<td>2019</td>
<td>2020</td>
</tr>
<tr>
<td><strong>First Compliance Deadline</strong></td>
<td>2026</td>
<td>2024</td>
<td>2026</td>
<td>2025</td>
</tr>
<tr>
<td><strong>Minimum Threshold Performance by building type</strong></td>
<td>Standards set no lower than median <strong>ENERGY STAR score</strong> (or equivalent)</td>
<td><strong>CO₂e emissions limits on a sq. ft. basis</strong></td>
<td><strong>Site EUI</strong> targets are 15% less than 2009-2018 averages</td>
<td>Standards set no higher than 35th percentile <strong>site EUI</strong> (so 65+% of buildings must improve)</td>
</tr>
<tr>
<td><strong>Compliance Cycle</strong></td>
<td>5 years</td>
<td>Buildings must comply annually; limits get stricter every ~5 years</td>
<td>5 years</td>
<td>4 years (6 years for affordable housing and houses of worship)</td>
</tr>
</tbody>
</table>
IMT’s BPS Model Ordinance

- IMT published the first model ordinance for building performance standards in January 2021
- Reviewed by expert stakeholders in real estate, equity, building science, building performance policy, law

- Model ordinance
- Summary of ordinance
- Summary presentation
IMT’s BPS Trajectory Approach: Final and Interim Standards for Three Office Buildings
Compliance Flexibility: Building Performance Action Plan (BPAP)

- Method by which building owner can propose an alternative compliance plan to avoid penalties for missing upcoming standard(s)

- The BPAP, if approved, is a binding agreement between building owner and jurisdiction

- Newly created attachment to building’s deed and any for-sale listings shall reference BPAP
BPAP Example: Building Ahead on Compliance
How IMT’s BPS Strategy Addresses Building Performance

Standards Based on Performance Metrics
- Site Energy Use Intensity
- Onsite and District Thermal GHGs
- Water Use Intensity
- Coincident Peak Demand

Actions to Advance Community Priorities
- Exploring affordable housing protections
- Owners seeking additional flexibility could be required to advance community priorities
BPS: A Platform for Building Regulation

Decarbonization + Electrification

Inclusiveness + Equity

Resilience + Public Health

Grid Reliability + Flexibility

Utility Bill Affordability
Community Priorities Policy Toolkit

**Health**
- Ventilation system design – ASHRAE 62.1 compliant?
- CO2 monitoring ramping up to include PM, VOCs, etc.

**Affordability**
- Implementation support ($$+TA)
- Tenant Protections
- Rental Standards
- Reporting on energy burden impact

**Resilience**
- Risk & vulnerability assessments
- Grid Interactivity
- Compliance flexibility for adaptation measures

**Economic Development**
- Workforce development parameters
- Procurement standards

Community engagement
Building Turnkey Support Programs

Goals:
• Deep retrofits
• Provide necessary compliance support to priority buildings, neighborhoods, and owners

Program Components:
1. Turnkey technical assistance
2. Upfront capital
3. Mandate = BPS
   Ideally this is a formal compliance option in order to take away owner uncertainty/risk of fine
U.S. City and County Policies for Existing Buildings:
Benchmarking, Transparency, and Beyond

- Requirements of achieving performance targets or completing additional actions
- Benchmarking policy for public, commercial, and multifamily buildings adopted
- Benchmarking policy for public and commercial buildings adopted

© Copyright 2020 Institute for Market Transformation. Updated 5/2020
BPS: The Near-Term Opportunity

- BPS adopted
- Serious consideration
- Conversations about BPS
Q&A

Zachary Hart
Associate Director, Building Performance Policy
zachary.hart@imt.org

www.imt.org/bps