Building Energy Policies and Municipal Opportunities in Illinois

Presentation to the Metropolitan Mayors Caucus Environment Committee

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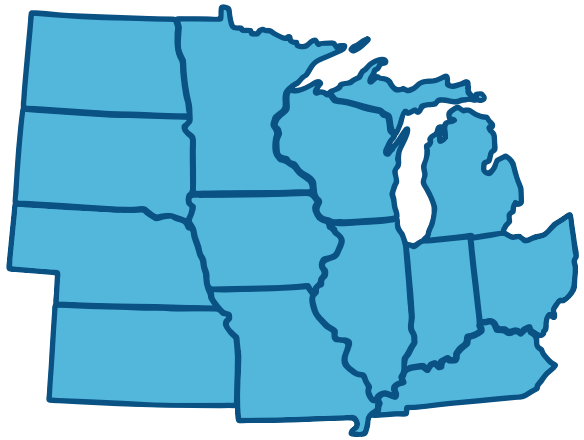
Climate + Clean Energy Solutions for everyone.

The knowledge, people, and resources to solve our biggest energy challenges.

Who We Are

The Midwest Energy Efficiency Alliance (MEEA) is a collaborative network, promoting energy efficiency to optimize energy generation, reduce consumption, create jobs and decrease carbon emissions in all Midwest communities.

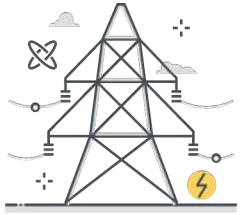


MEEA is a non-profit membership organization with 170+ members, including:

Energy Service Companies & Contractors

State & Local Governments

Academic & Research Institutions



Electric & Gas Utilities

Community-based Organizations

MEEA
MIDWEST ENERGY EFFICIENCY ALLIANCE

Building Performance Standards

Energy Policies for Existing Buildings

Phase 1)

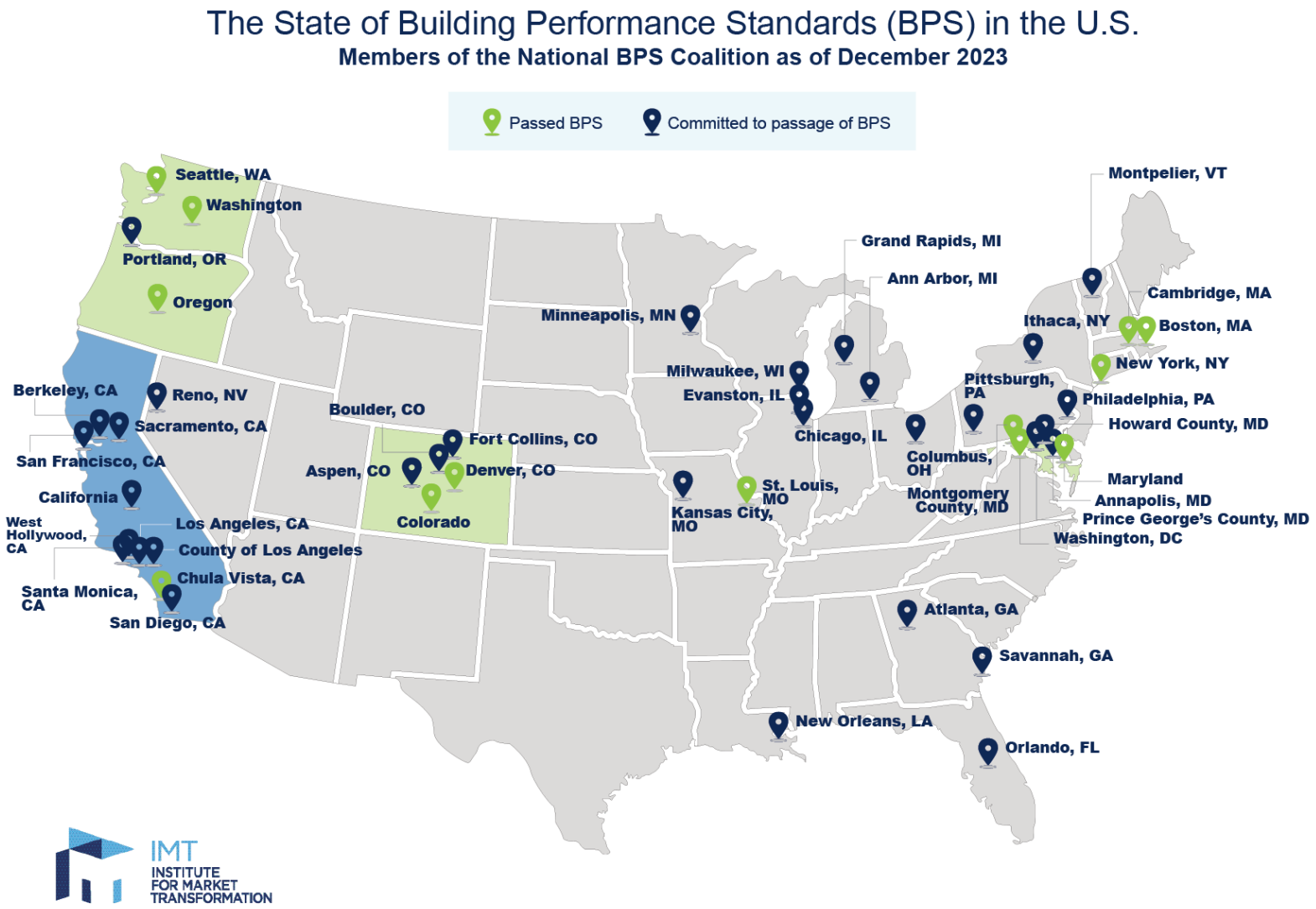
Benchmarking Policy

Requirement that focuses on **measuring building energy consumption** to compare performance to itself, other buildings, or an applicable standard over time

Phase 2)

Building Performance Standard (BPS) Policy

Requirement that focuses on improving the existing building stock through **setting minimum targets for efficiency upgrades**



Spotlight BPS Policy: St. Louis, MO

- Applies to municipal, commercial, institutional, and residential properties 50,000 sq. ft. and larger
- Sets maximum energy use per sq. ft. for buildings 50,000 sq. ft. and larger, based on building type.
- Property owners must meet site EUI standards through physical or operational improvements within specified timelines (four years for most, six years for affordable housing and houses of worship).

Image Source: https://imt.org/resources/map-national-bps-coalition-participating-jurisdictions/
St. Louis BPS: https://www.stlouis-mo.gov/government/departments/public-safety/building/building-energy-improvement-board/documents/upload/STL-BEPS-Fact-Sheet-2022-02-08.pdf

Why implement Building Performance Standards?

- BPS set enforceable energy targets to support local energy or climate action goals
- Drive additional energy/cost savings and emissions reductions beyond just benchmarking
- Spur energy efficiency upgrades, building retrofits, building electrification, and renewable energy growth
- Influence new building construction to be more energy efficient and complement stretch codes
- Improved indoor air quality and occupant health and comfort

Source: https://www.epa.gov/sites/default/files/2021-02/documents/benchmarking_building_performance_standards_section2.pdf

BPS Policy Setting Framework

Prepare to ensure policy support

- Engage with stakeholders and utilities to understand potential energy and cost impacts, as well as types of support needed.
- Analyze existing building stock and energy use to understand which buildings and demographics will be impacted by BPS
- Use baseline data, stakeholder input, and municipal priorities to develop policy goals

Implement Benchmarking Policy to establish baselines for future BPS policy

- Define covered buildings, energy to benchmark (e.g., electric, natural gas) and compliance deadlines
- Identify tools/software for energy tracking, reporting, and communication
- Establish benchmarking assistance and internal data review processes
- Draft and finalize ordinance language based on stakeholder input

Develop BPS Policy based on data from benchmarking policy

- Define performance metrics (e.g., site EUI, GHG emissions)
- Define interim performance targets based on benchmarking data
- Define compliance deadlines, pathways, and penalties

Implement BPS with support from utilities, MMC, and partners

- Perform internal review of benchmarking and BPS programs
- Periodically update interim performance targets and goals
- Share results with the community

Integrate Equity, Stakeholder Engagement, and Cost Considerations at every stage

Programs to support building policies

Advanced Building Energy Efficiency Policy (ABEEP) Goals

- Provide the technical resources needed for municipalities to understand and move towards adoption of stretch codes and BPS
- Assist municipalities in preparing and advancing building energy policies, and gaining the tools to do so
- Work with municipalities to identify barriers to policy adoption and implementation
- Share experiences across municipalities and experts in the region
- Work one on one with municipalities, and also within a cohort

Past ABEEP Meeting Topics

- Benefits and costs of constructing high-efficiency buildings
- Introduction to BPS and Illinois stretch codes provisions and process
- Policymaking frameworks for stretch code and BPS
- Poll on current expectations and influences surrounding the adoption of advanced building policies
- Overview of technical assistance for policy adoption

Fact Sheets and Guides

Current list

- Local Stakeholder Engagement Process
- Analyze Existing Building Stock Data and Define Scope
- Choose Building Performance Metric and Determine Targets
- Create Compliance Pathway and Determine Timeline
- Build Your Own Stretch Code
- Benchmarking 101
- Policy maker support
- Case Studies

Analyze Existing Building Stock Data and Define Scope

WHAT	WHY	WHO	WHEN
Analysis of baseline conditions to understand types of buildings, owners, tenants that could be impacted by BPS and to define which buildings would be covered by the policy.	Research provides a greater understanding of how BPS will impact the community and the overall impact on energy.	Natural gas and electric utilities can provide technical support during this process.	A study should be done early in the process to understand policy considerations.

ANALYSIS CAN INCLUDE

Building types

- How many commercial and residential buildings?
- What are the common building types?
- How big are the buildings?
- What's the building age?
- What are common heating and cooling systems?

People

- Which buildings will be impacted?
- What are the demographic details of buildings impacted?
- What are barriers for these buildings?

Decision-making

- Who makes decisions at buildings?
- Are the buildings occupied by renters or owners?
- What relationships does the city have with building owners?
- What are channels of communication?

COVERED BUILDINGS

By building type

- Often include commercial and high-rise multifamily buildings
- Low-rise and single family typically not included as part of policy
- May exclude low-income or affordable housing buildings, or provide longer timelines to comply

By size

- Can be informed by initial existing building stock analysis
- Vary between 10,000 and 50,000 square feet
- Sometimes include smaller buildings but set a later date for initial compliance

CITY	COVERED BUILDINGS
Boston	All commercial and multifamily buildings > 20,000 sq ft.
Maryland	Public, commercial and multifamily buildings > 35,000 sq ft.
New York City	All commercial and multifamily > 25,000 sq ft.
St. Louis, MO	Municipal commercial institutional and multifamily buildings > 50,000 sq ft
Washington DC	**2021:** Privately owned building > 50,000 sq ft **2027:** Privately owned buildings > 25,000 sq ft **2033:** Privately owned buildings > 10,000 sq ft

Technical Assistance During Policy Adoption

Presentations

- Overview presentations to municipal staff, policymaker, stakeholders or the public
- Technical presentations or trainings to building professionals, city staff, and others

Technical information

- Cost-benefit analysis specific to the municipality
- Building stock analysis to inform policy
- External and internal policy guidance documents

Templates and language

- Policy language
- Rulemaking information

Designing & Implementing Building Performance Standards in Small, Rural, and Justice40 Communities

- **Technical Assistance**
  - Receive support on how to add administrative capacity to implement the policy, engage stakeholders, support local job growth, and more.
- **Peer-to-Peer Exchange**
  - Engage with other communities to help inform efforts, identify needs
  - In-person and Virtual meetings
- **Software Access**
  - Access to the BEAM platform to help implement the policy

CLEARLYENERGY

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