

Building Performance Standards



Cliff Majersik

BayREN

September 15, 2022

What is a Building Performance Standard? (BPS)

1 A policy that establishes standards for buildings to improve performance including reducing energy use or GHG emissions

2 Compliance takes place over a long timeframe, with intermediate reporting and compliance periods

3 The policy becomes more stringent over time

4 Requires impactful changes to buildings while offering flexibility in how and when building owners make those changes

Fundamental change to how we approach buildings



Building Performance Standards are the most powerful policy tool available to drive improved building performance

BPS Impact

Washington, DC estimates that its BPS will **reduce energy** use in buildings **by 20%**, over 1M tons of CO2 annually

Washington State projects its BPS will reduce annual **CO2** emissions by **14M tons by 2035**

New York City projects a reduction of 6M tons of CO2 annually by 2030 and the creation of **~126,000 green jobs***

Urban Green-led expert panel predicts the NYC energy retrofit market represents a mid range market opportunity of **\$20B**

Source: Urban Green Council
https://www.urbangreencouncil.org/sites/default/files/urban_green_retrofit_market_analysis.pdf

BPS Compared to Other Policies

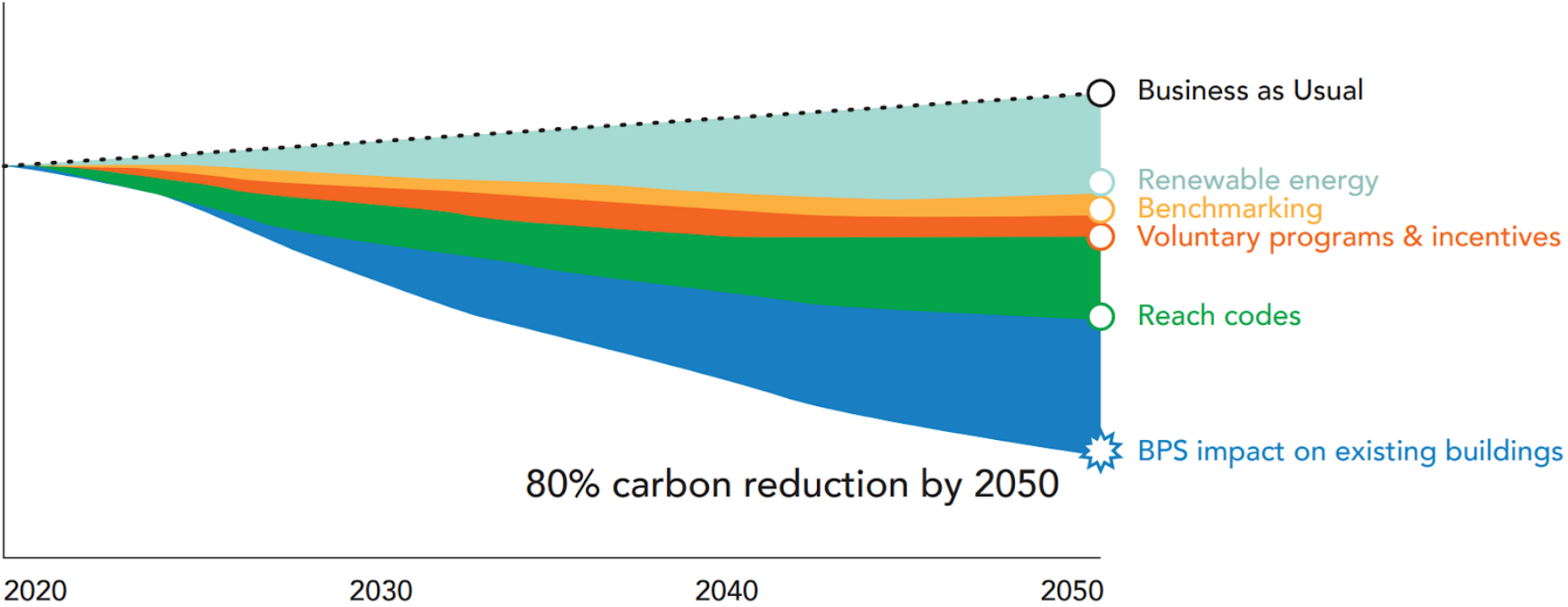


Image from IMT/USDN webinar on impact of BPS

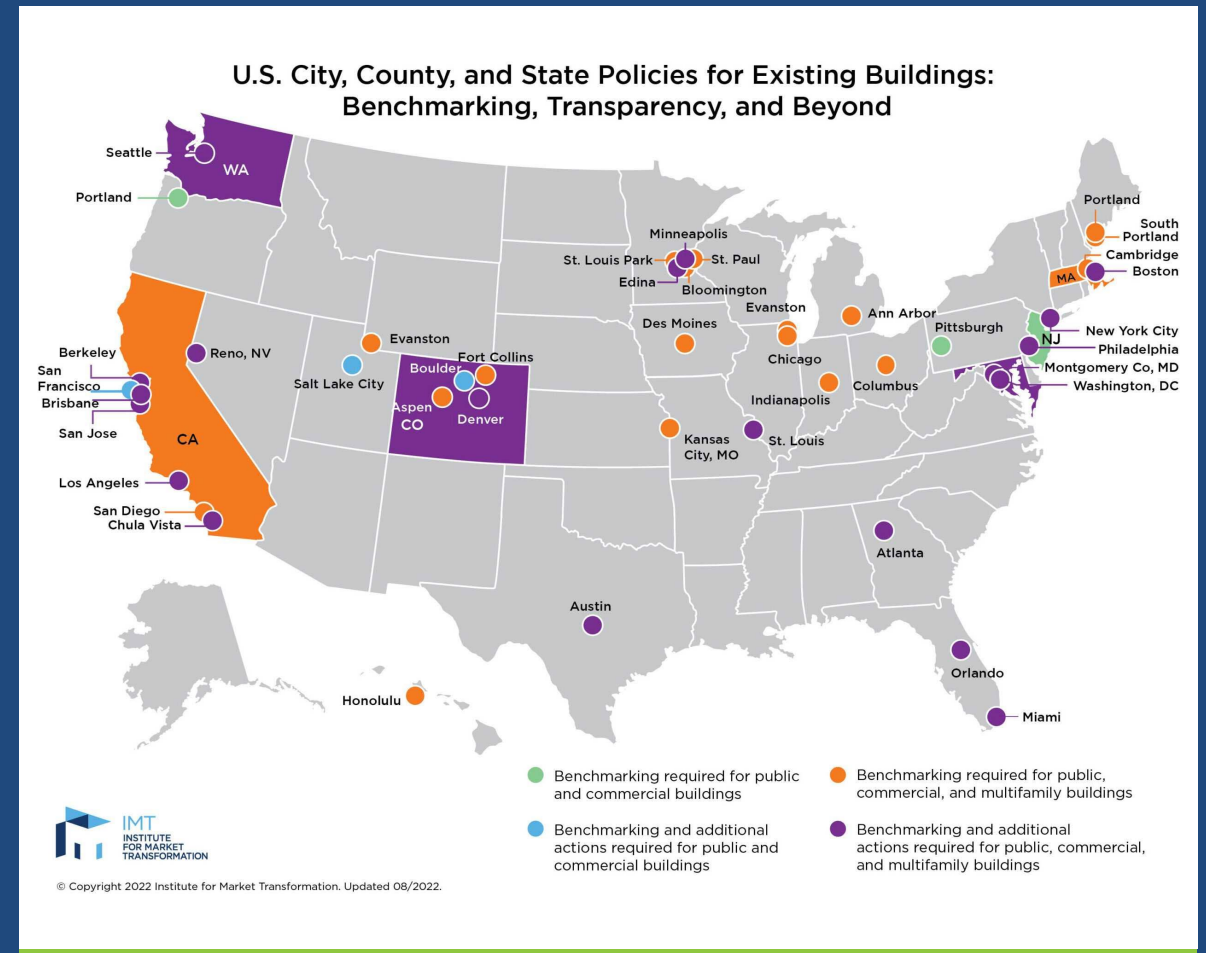
BPS is not Benchmarking

Benchmarking is energy management.

BPS is energy improvement

BPS focuses on:

- Meeting performance *targets by deadlines*
- Using benchmarking data as baseline for reporting
- Driving continuous, market wide energy reduction through entire building stock



BPS is not Benchmarking

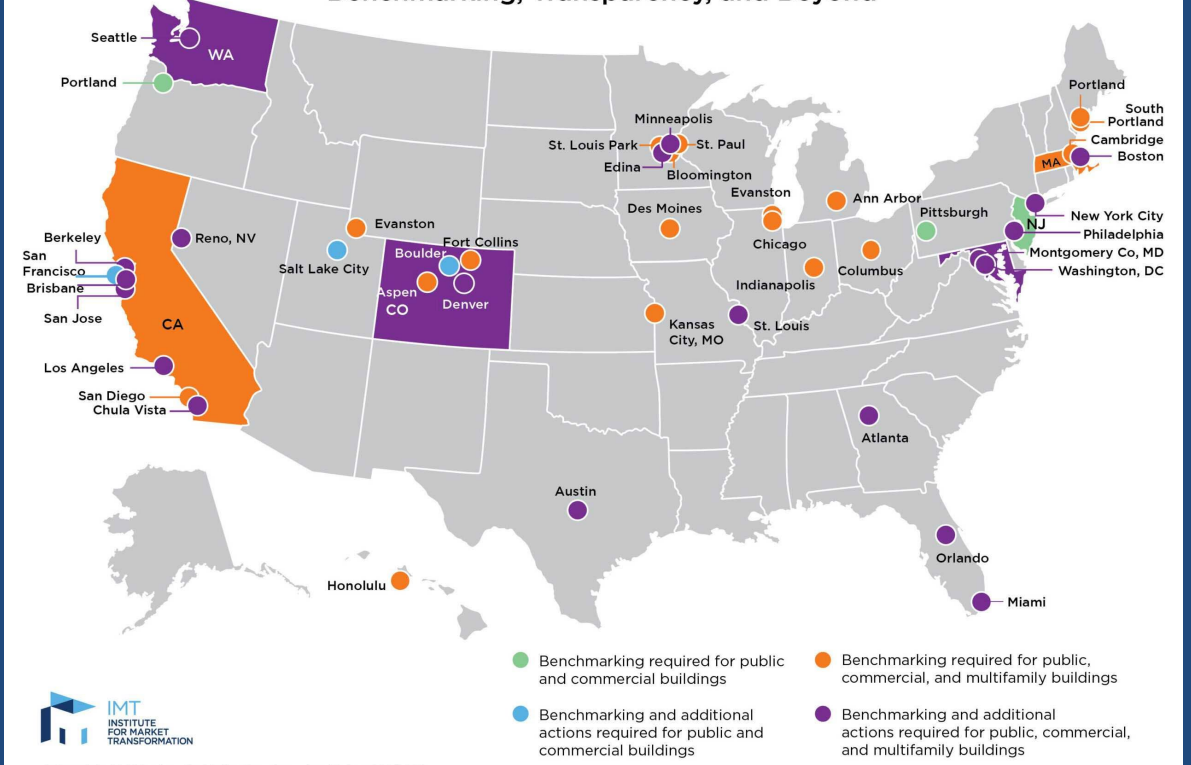
Benchmarking is energy management.

BPS is energy improvement

Benchmarking focuses on:

- Using consumption data to inform building operation
- Improving building energy usage by making it *visible*

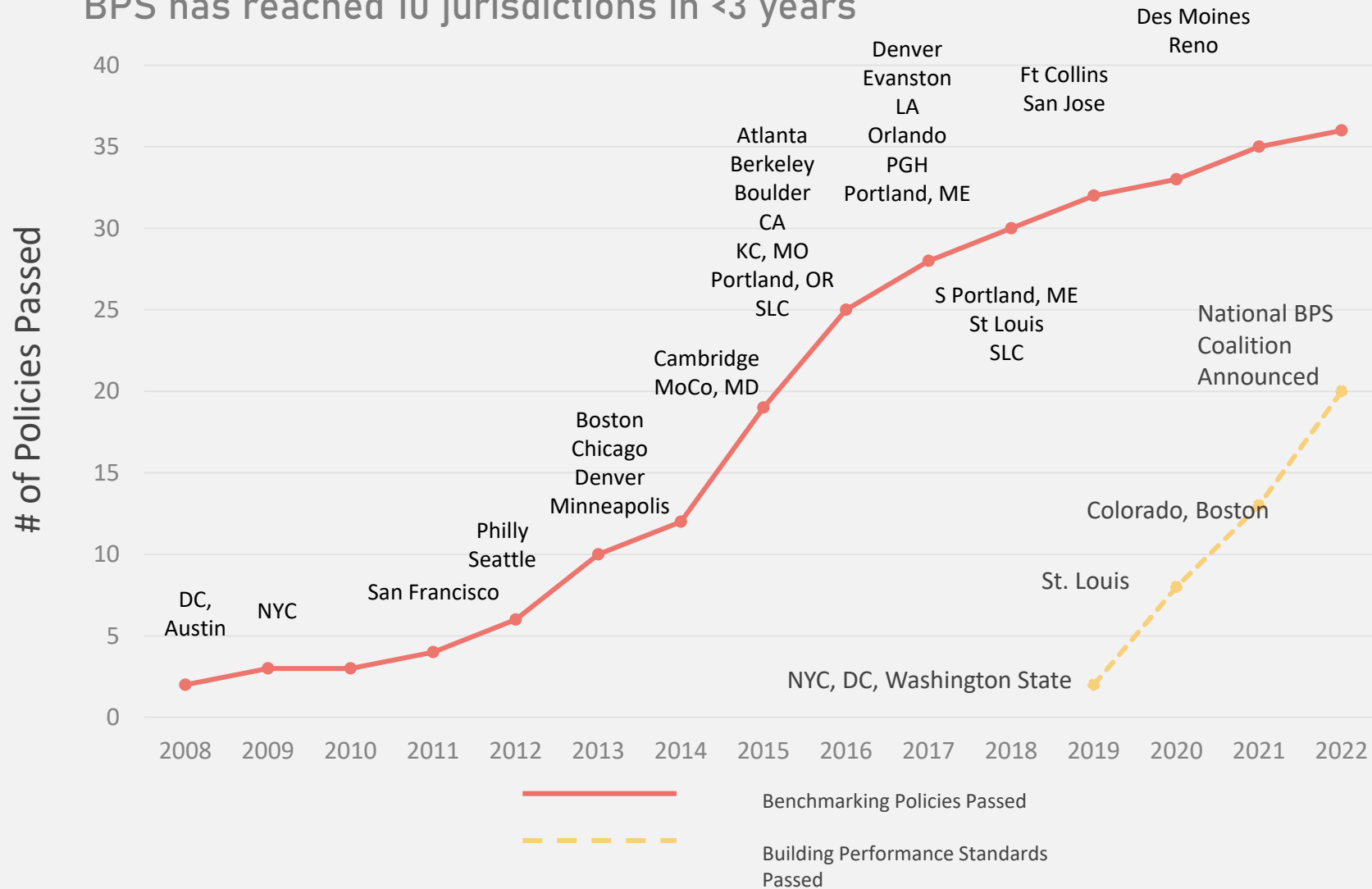
U.S. City, County, and State Policies for Existing Buildings:
Benchmarking, Transparency, and Beyond



© Copyright 2022 Institute for Market Transformation. Updated 08/2022.

Trends in Building Policies

BPS has reached 10 jurisdictions in <3 years



Example BPS Laws



Washington, DC

Size: 10-50k sq ft

Measuring: Energy

Metric: ENERGY STAR 1-100 score

Building Types: Commercial and multifamily

Standard is recalculated each compliance cycle



New York, NY

Size: 25k sq ft

Measuring: Carbon

Metric: kgCO₂e/sf

Building Types: Commercial and multifamily

Standard increases in stringency on path preset in law



St. Louis, MO

Size: 50k sq ft

Measuring: Energy

Metric: Site EUI

Building Types: Commercial and multifamily

Standard is recalculated each compliance cycle

IMT's BPS Model Law

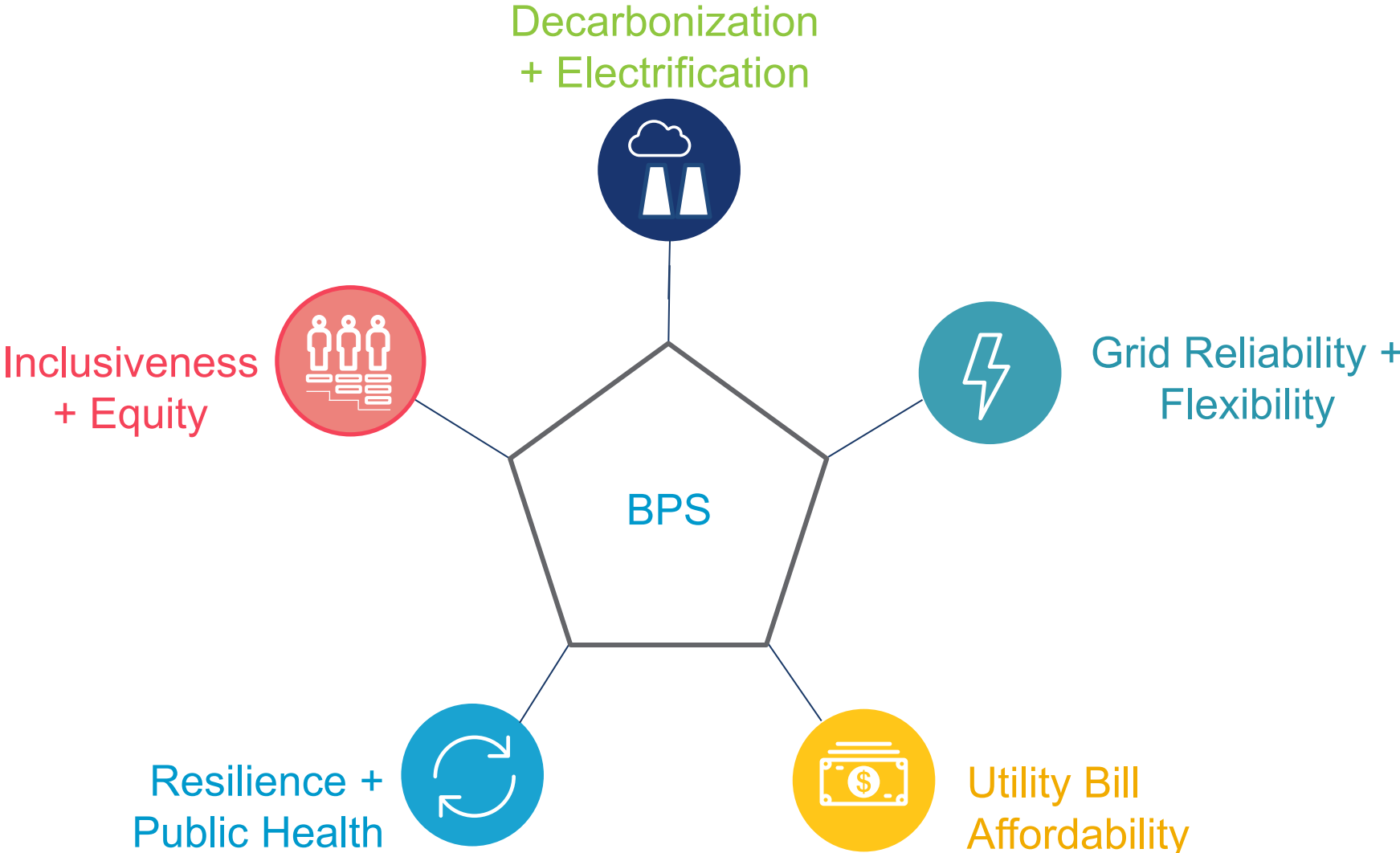
- IMT published the first model law for building performance standards in January 2021
- Incorporates lessons learned from adopted BPS
- Reviewed by expert stakeholders in real estate, social equity, building science, building performance policy
- www.imt.org/bps
 - [IMT Model BPS law](#)
 - [Summary of law](#)
 - [Summary presentation](#)



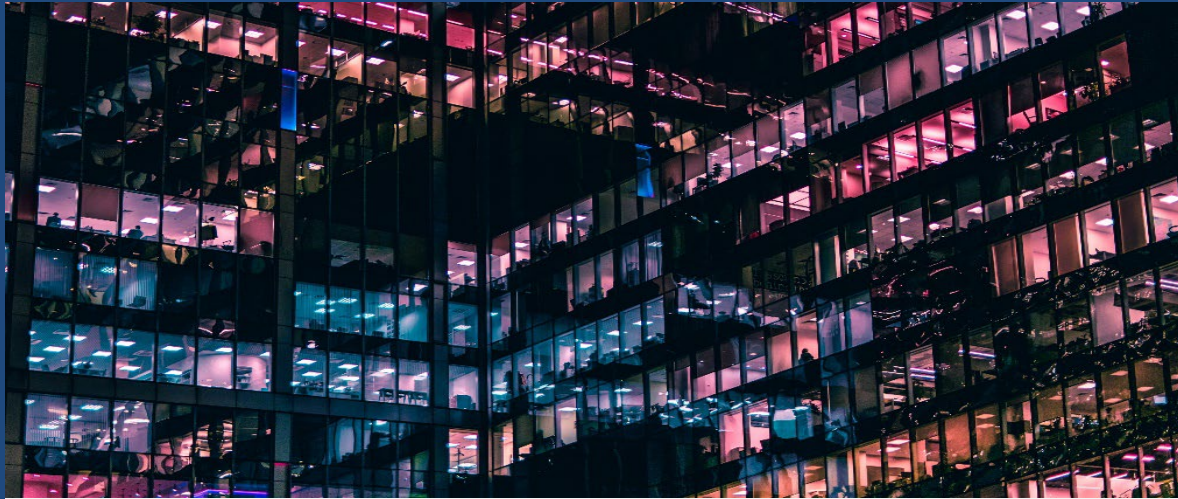
Principles

1. Align with goals/commitments
2. Social and racial equity
3. Regulatory fairness
4. Jobs and economic growth
5. Maximize certainty
6. Transparency
7. Drive early action
8. Accommodate building life cycle events
9. Simplicity
10. Ease of compliance/ implementation

BPS: A Platform for Building Regulation



How IMT's BPS Strategy Addresses Building Performance



Performance Metrics

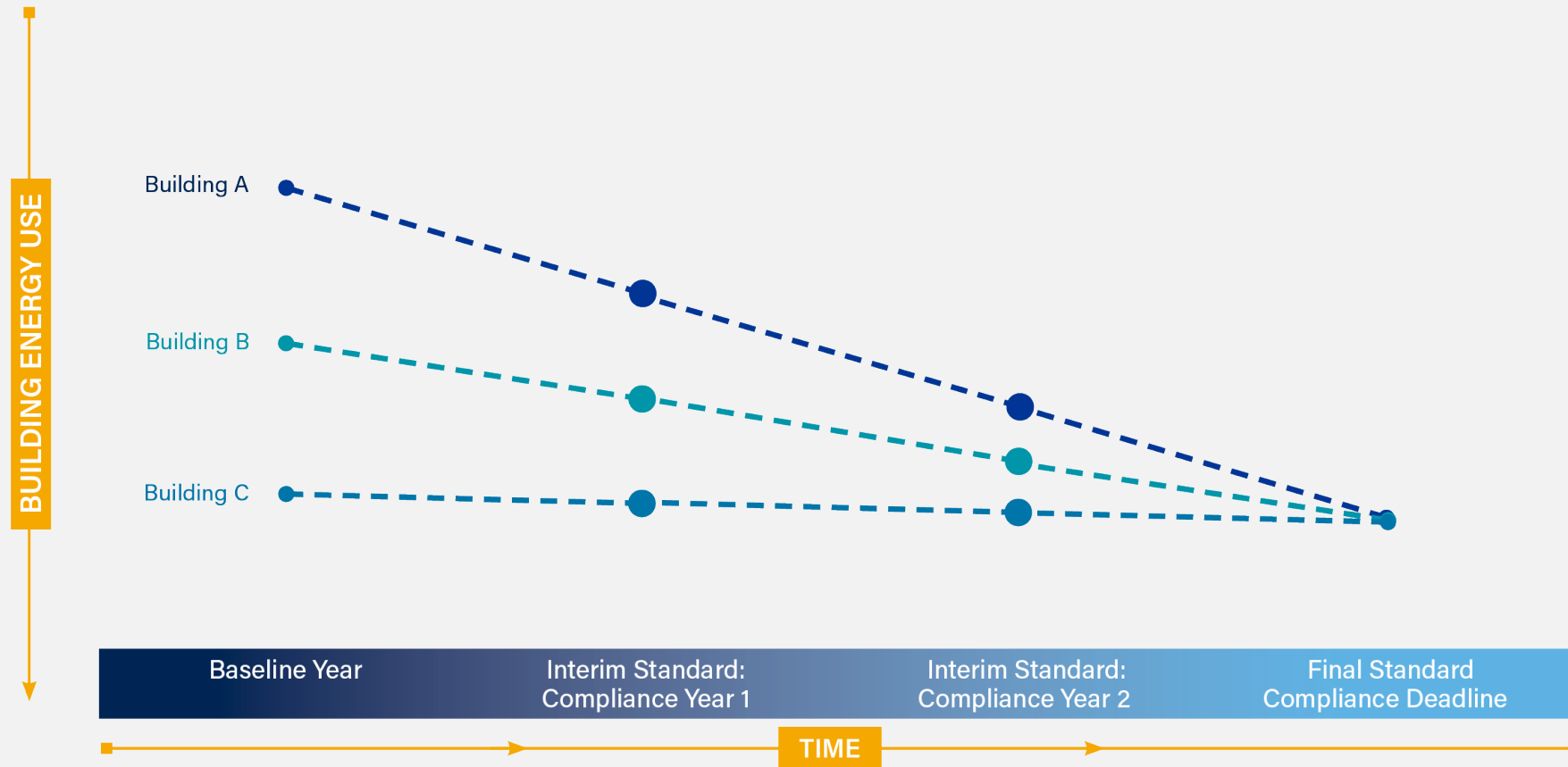
- Site Energy Use Intensity
- Onsite and District Thermal GHGs
- Water Use Intensity
- Coincident Peak Demand
- Ventilation/Indoor Air Quality



Actions to Advance Social Priorities

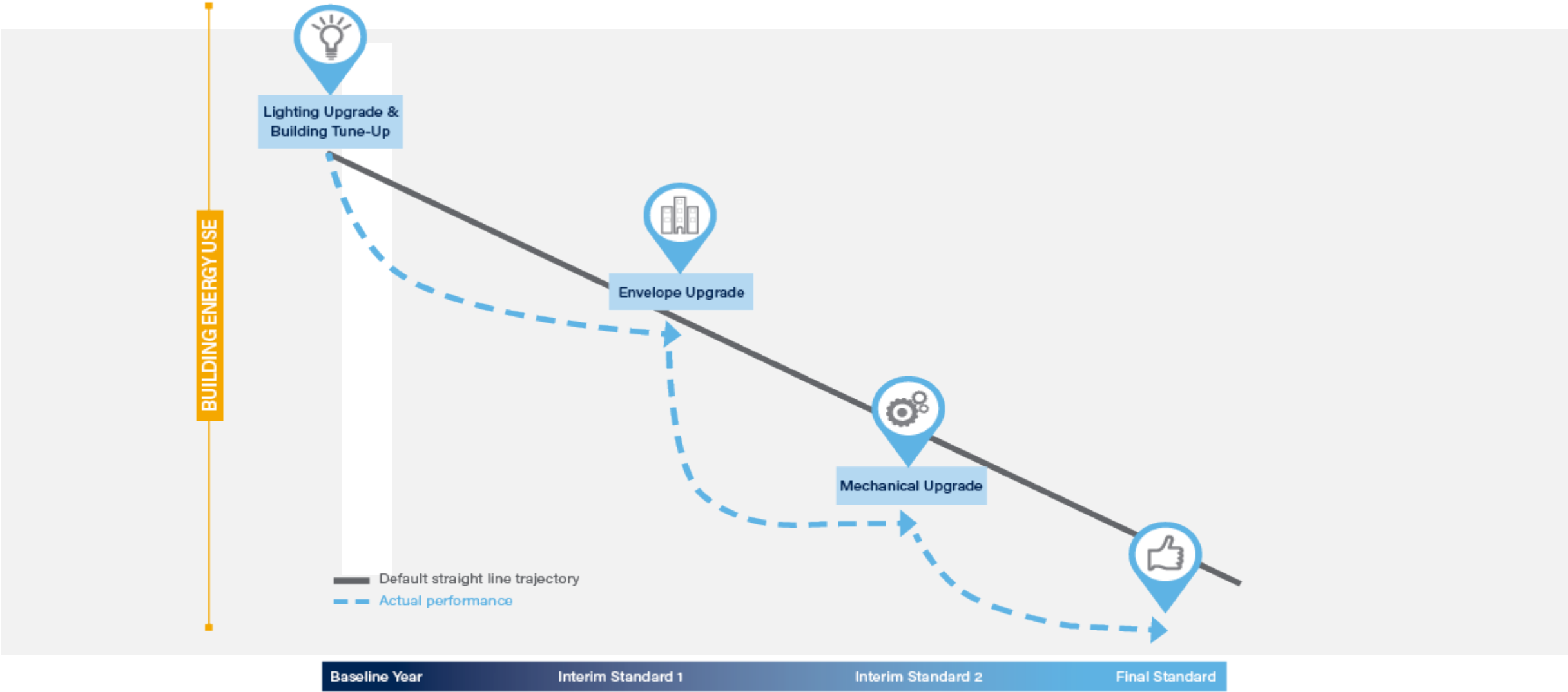
- Anti-displacement, affordable housing protections packaged with BPS
- Owners seeking additional flexibility required to advance other community priorities

Example: Final and Interim Standards for 3 Office Buildings

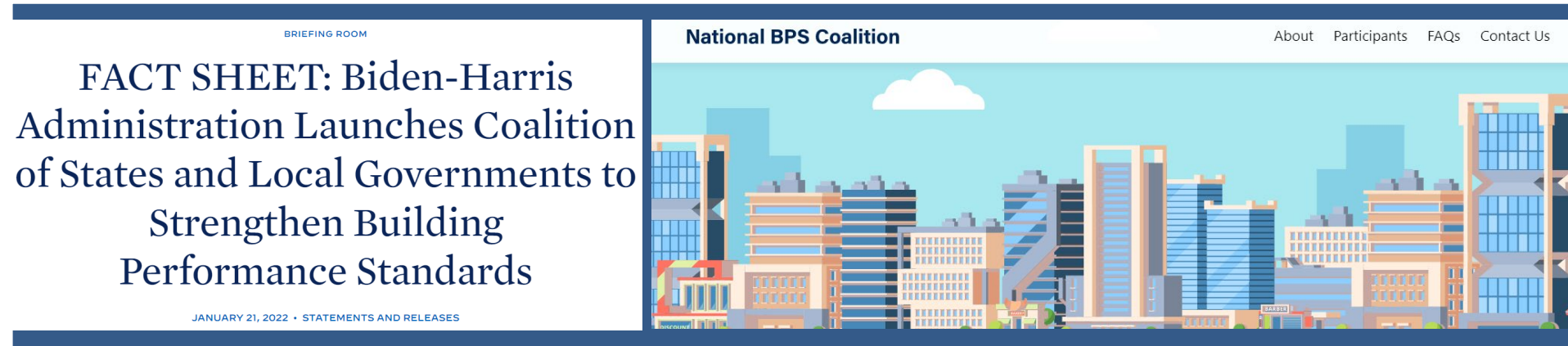


Compliance Example

Owner decides when and how to improve building




National BPS Coalition



- **37 participating governments** have committed to passing building retrofit policies like BPS by **Earth Day 2024**
- Federal agencies have committed to align **federal resources with policy design and implementation**
- **www.nationalbpscoalition.org**

President Biden's National Building Performance Standard Coalition





thanks!

Cliff Majersik
Senior Advisor
cliff at imt.org
Twitter: @IMTCliff

For more info: www.imt.org/bps