

Building Performance Standards: A Cornerstone to Climate Policy



October 2021

Fundamental Change to How We Approach Buildings



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

What Makes a BPS Different?

Requires Improvement Across a Wide Range of Buildings

Yields Deep Retrofits at Scale

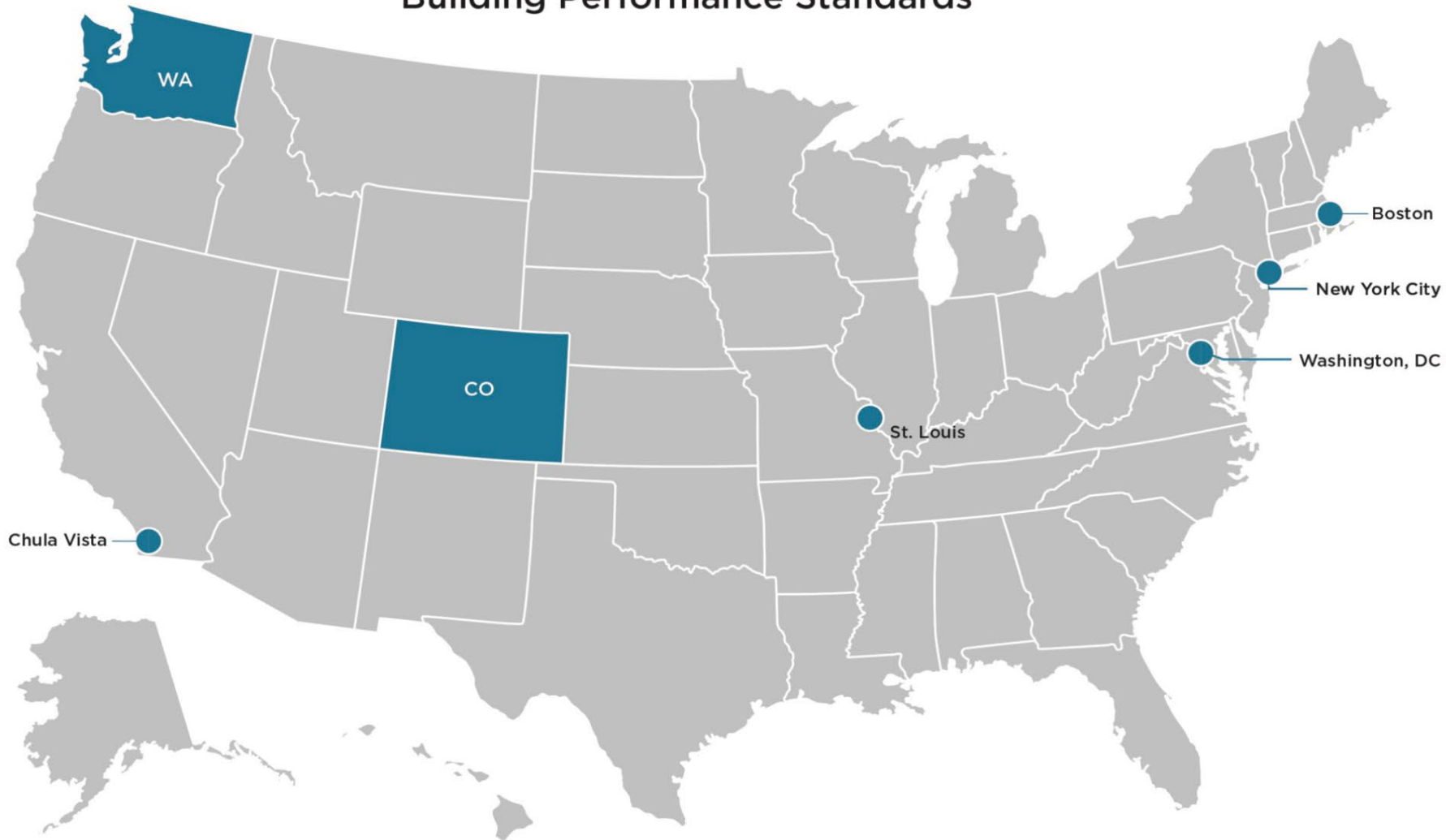
Drives Private Value, Creating Investment in Private Buildings

Provides Comprehensive Approach to Performance

Balances Flexibility and Immediate Action

Sends Long-Term Signal

U.S. City and State Policies for Existing Buildings: Building Performance Standards



Building Rating

SHARING TRANSPARENCY FOR A MORE EFFICIENT FUTURE

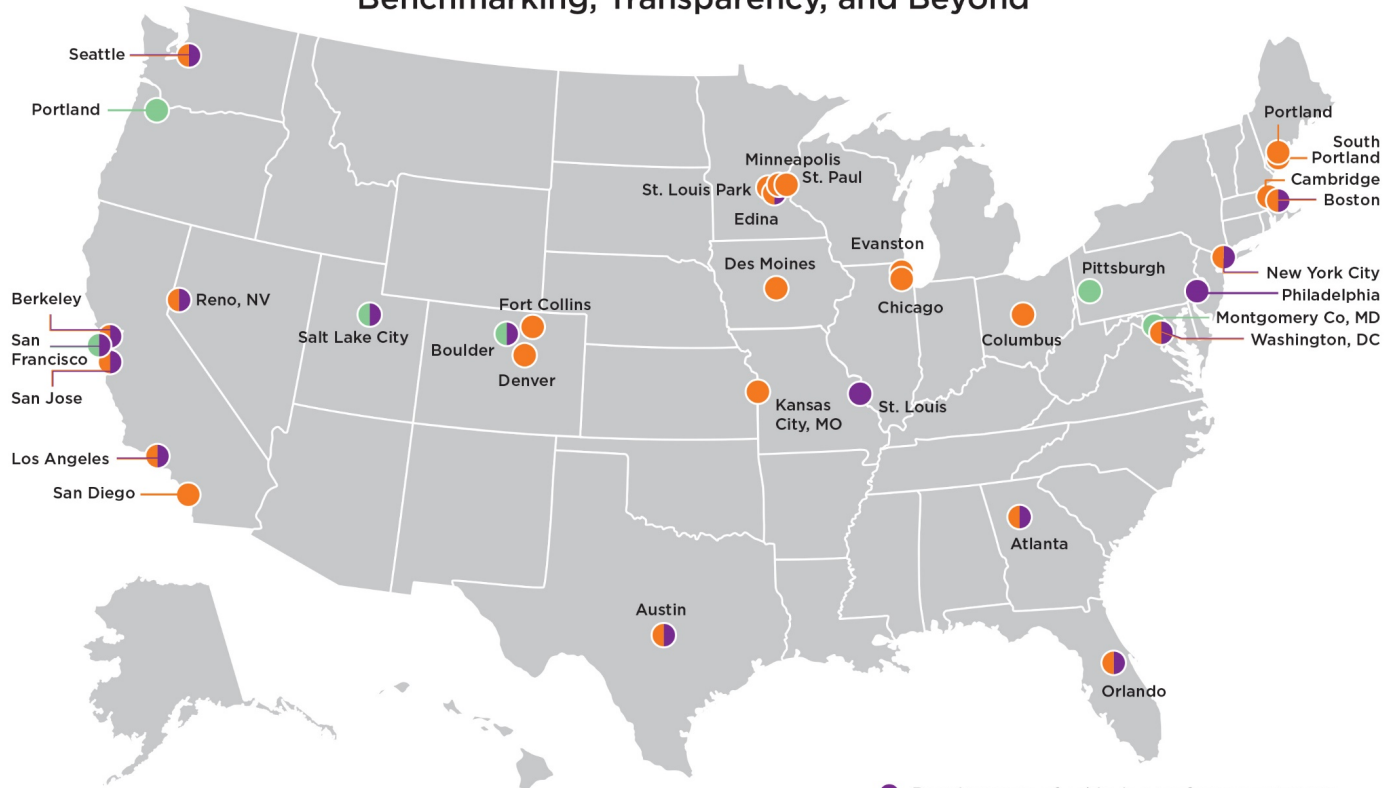


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BPS Around the United States

	Washington, DC	New York City	WA State	St. Louis, MO	Montgomery County
Year Adopted	2019	2019	2019	2020	Pending
First Compliance Deadline	2026	2024	2026	2025	~2026
Minimum Threshold Performance by building type	Standards set no lower than median ENERGY STAR score (or equivalent)	CO₂e emissions limits on a sq. ft. basis	Site EUI targets are 15% less than 2009-2018 averages	Standards set no higher than 35 th percentile site EUI (so 65+% of buildings must improve)	In development to be set in regulation, based on site EUI
Covered Buildings	Commercial and multifamily > 10K sq. ft.	Commercial and multifamily > 25K sq. ft.	Commercial > 50K sq. ft.	Commercial and multifamily > 50K sq. ft.	Commercial and multifamily > 25K sq. ft.
Compliance Cycle	5 years	Buildings must comply annually; limits get stricter every ~5 years	5 years	4 years (6 years for affordable housing and houses of worship)	Long-term target with 4 year interim check ins

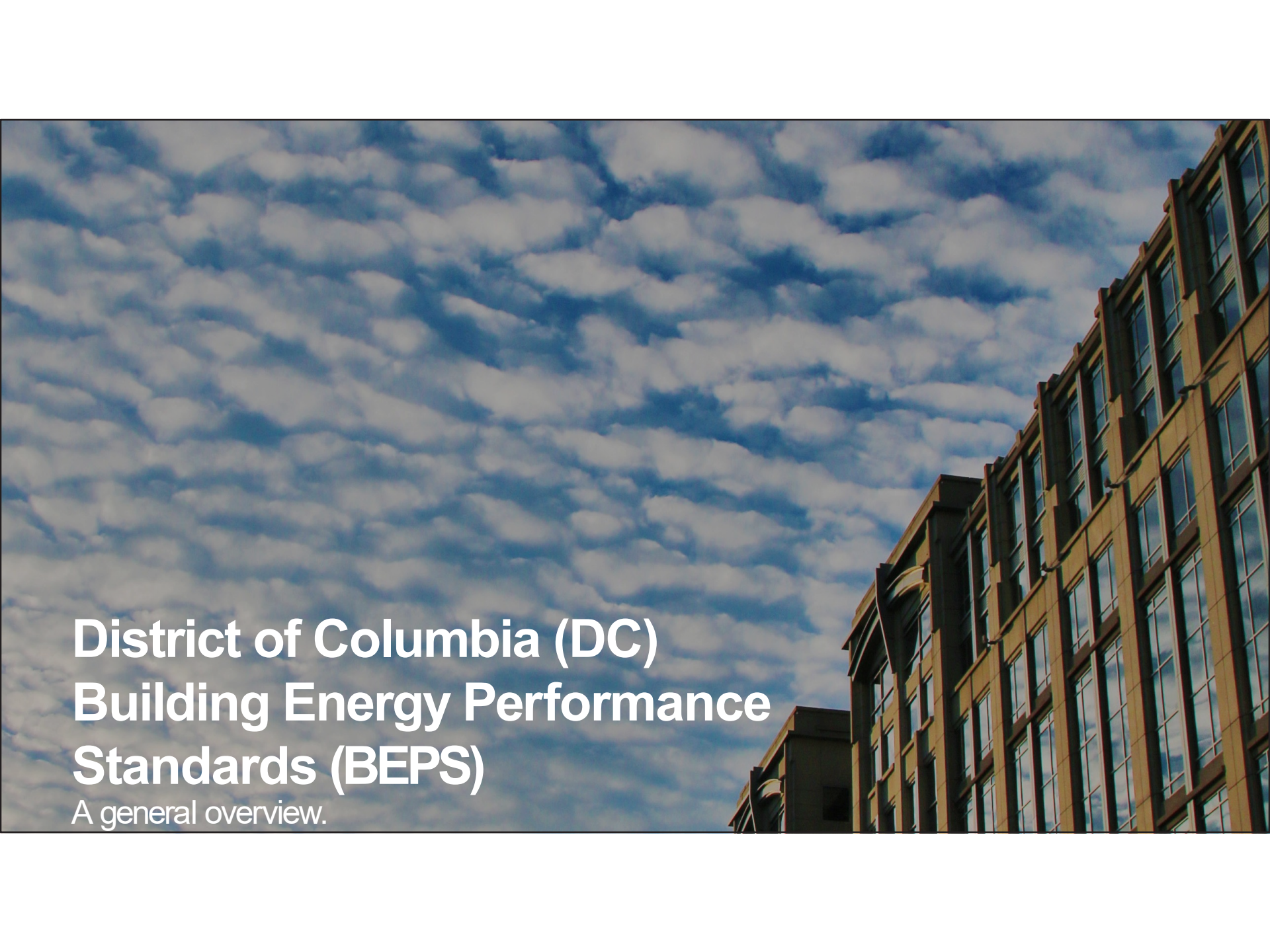
U.S. City and County Policies for Existing Buildings: Benchmarking, Transparency, and Beyond



- 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



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District of Columbia (DC) Building Energy Performance Standards (BEPS)

A general overview.

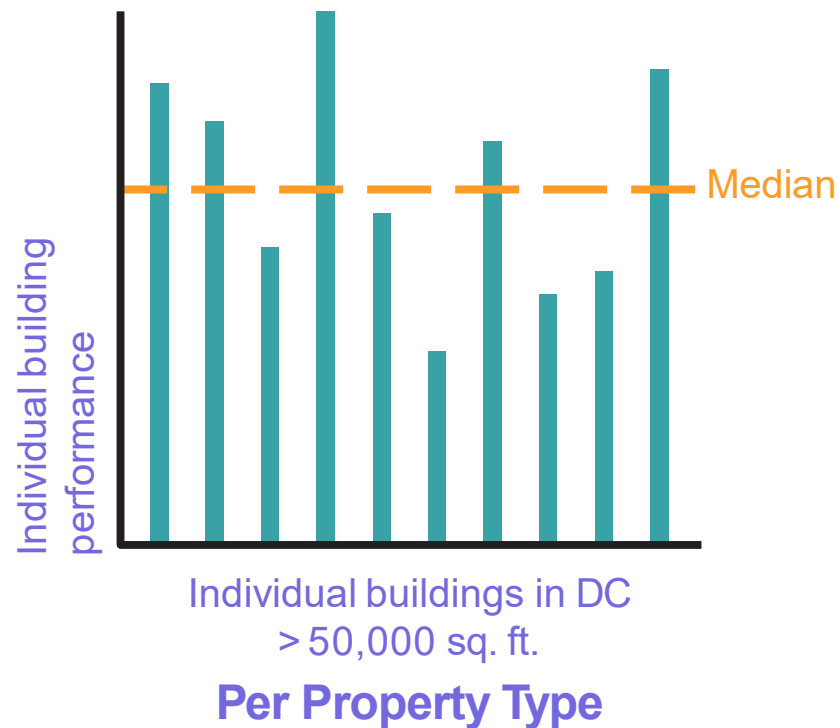
DC BEPS

The basic concept.

The basic concept.

The DC BEPS sets a minimum threshold for energy performance for existing buildings.

These standards are based on and measured against a building's demonstrated energy performance, as shown in their benchmarking data.



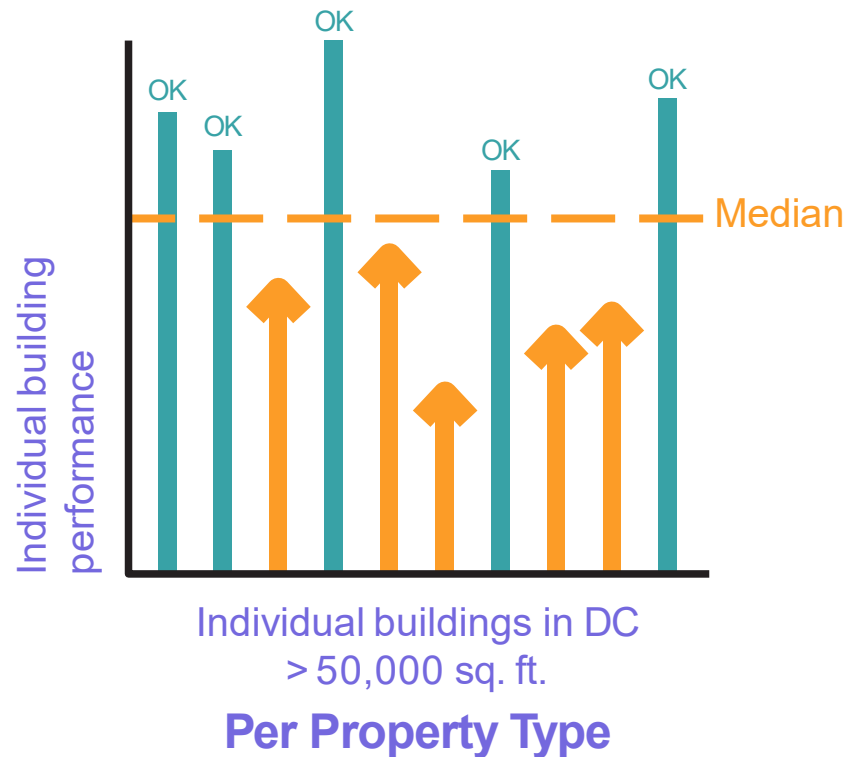
DC BEPS

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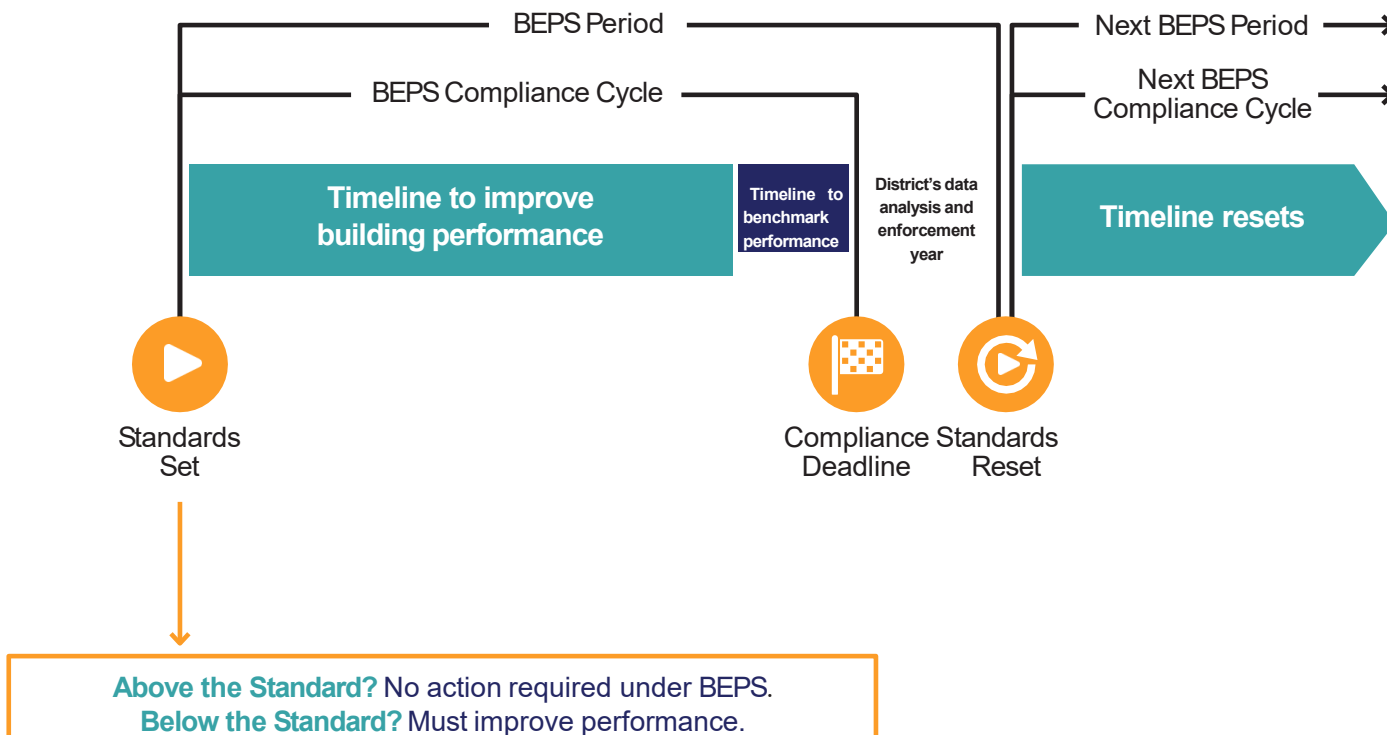
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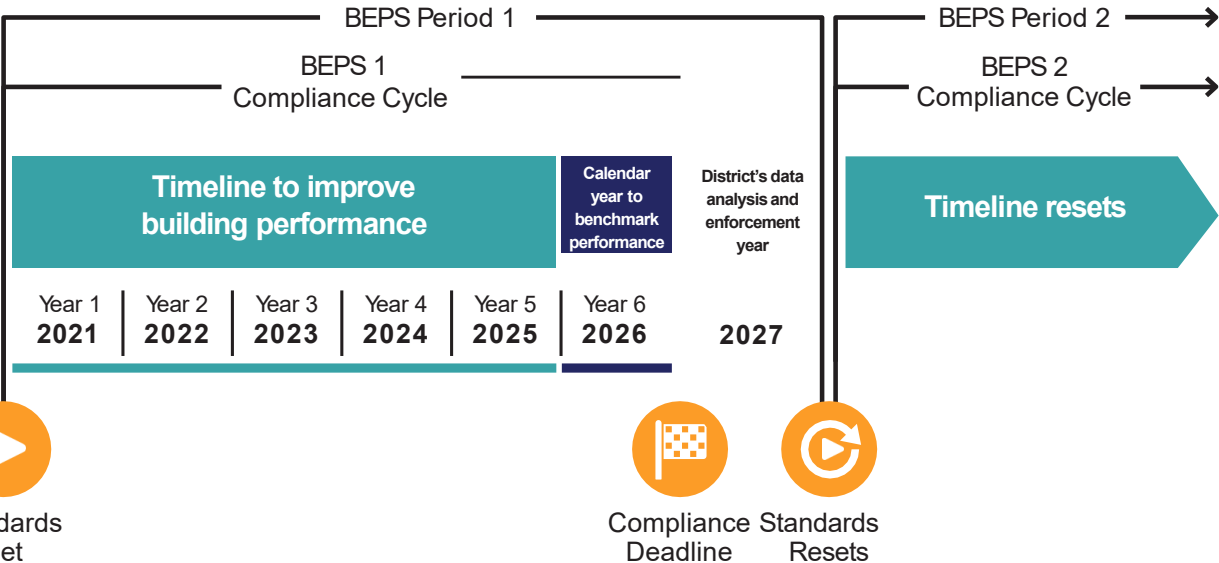
DC BEPS

The basic concept.



DC BEPS

The first compliance cycle.



Above the Standard? No action required under BEPS.
Below the Standard? Must improve performance.

DC BEPS rules

What has been released.

Compliance Pathways. Building owners have a variety of paths to choose from to bring their buildings into compliance.

Performance Path	Prescriptive Path	Standard Target Path	Alternative Compliance Path
Reduce site energy usage 20%	Follow a set path of efficiency measures	Reach the standard for your property type	Apply for a path with special criteria

Buildings that fall below the BEPS will be required to select a compliance pathway no later than **February 1, 2023**.

DC BEPS standards

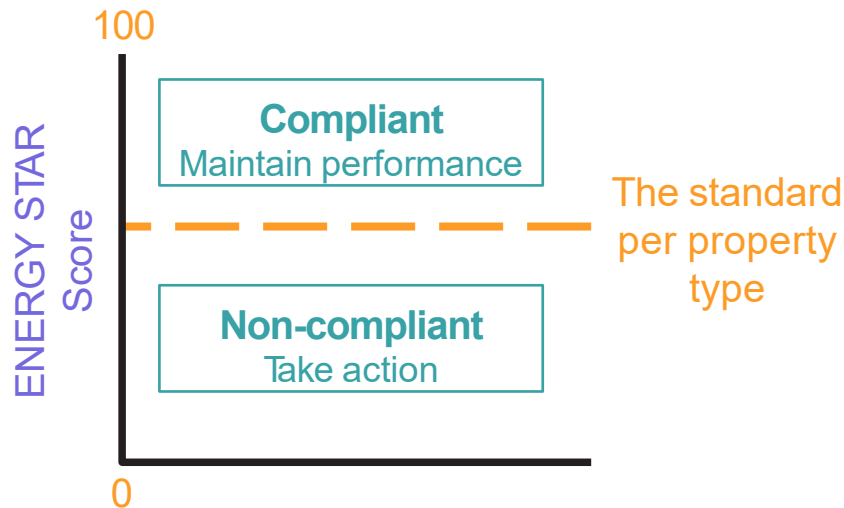
The Standards for the First Compliance Cycle of BEPS. The standards, the median levels of performance with which the BEPS rules will apply per property type.

Property Type	ENERGY STAR Score	Source EUI
Hotel	54	183.9
Multifamily Housing	66	110.7
Office	71	153.7
K-12 School	36	139

DC BEPS standards

How to know if you meet the standard.

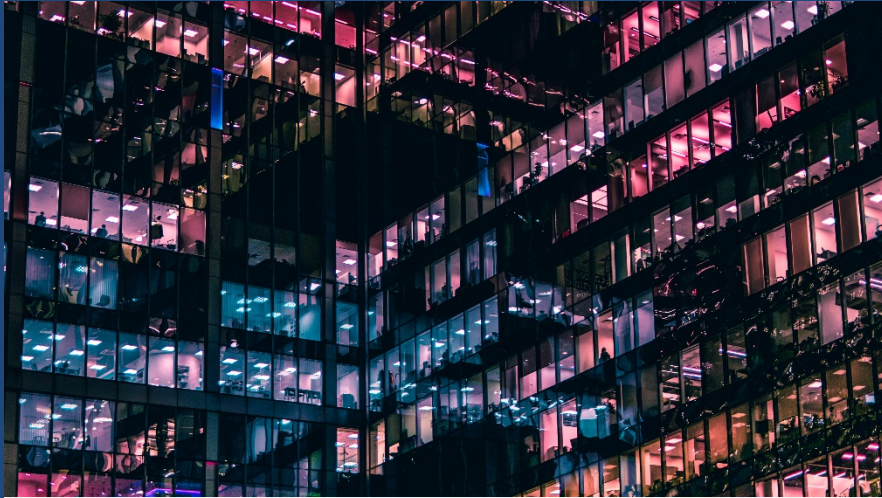
For buildings that can receive an ENERGY STAR score, a building **will not meet the standards** if, based on its 2019 energy benchmarking data, its **score is less** than the ENERGY STAR score standard listed for their property type.





IMT's Model BPS Ordinance

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 Social Priorities

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



Equity as a Foundation

A BPS designed with equity at its foundation improves outcomes for everyone.

A collection of light-colored wooden blocks and geometric shapes, including arches, rectangles, and triangles, arranged on a brown surface. The blocks are stacked and scattered, creating a sense of construction and building.

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

Compliance Details

Final Performance Standards:

For each performance metric, buildings must meet a long-term (15-30+ years in the future), final performance standard by a prescribed date.

Final performance standards are the same for each building type.

Interim Performance Standards:

Each building has its own trajectory for reaching the final standard based on its performance in the baseline year

Jurisdiction sets interim standards to drive buildings' progress

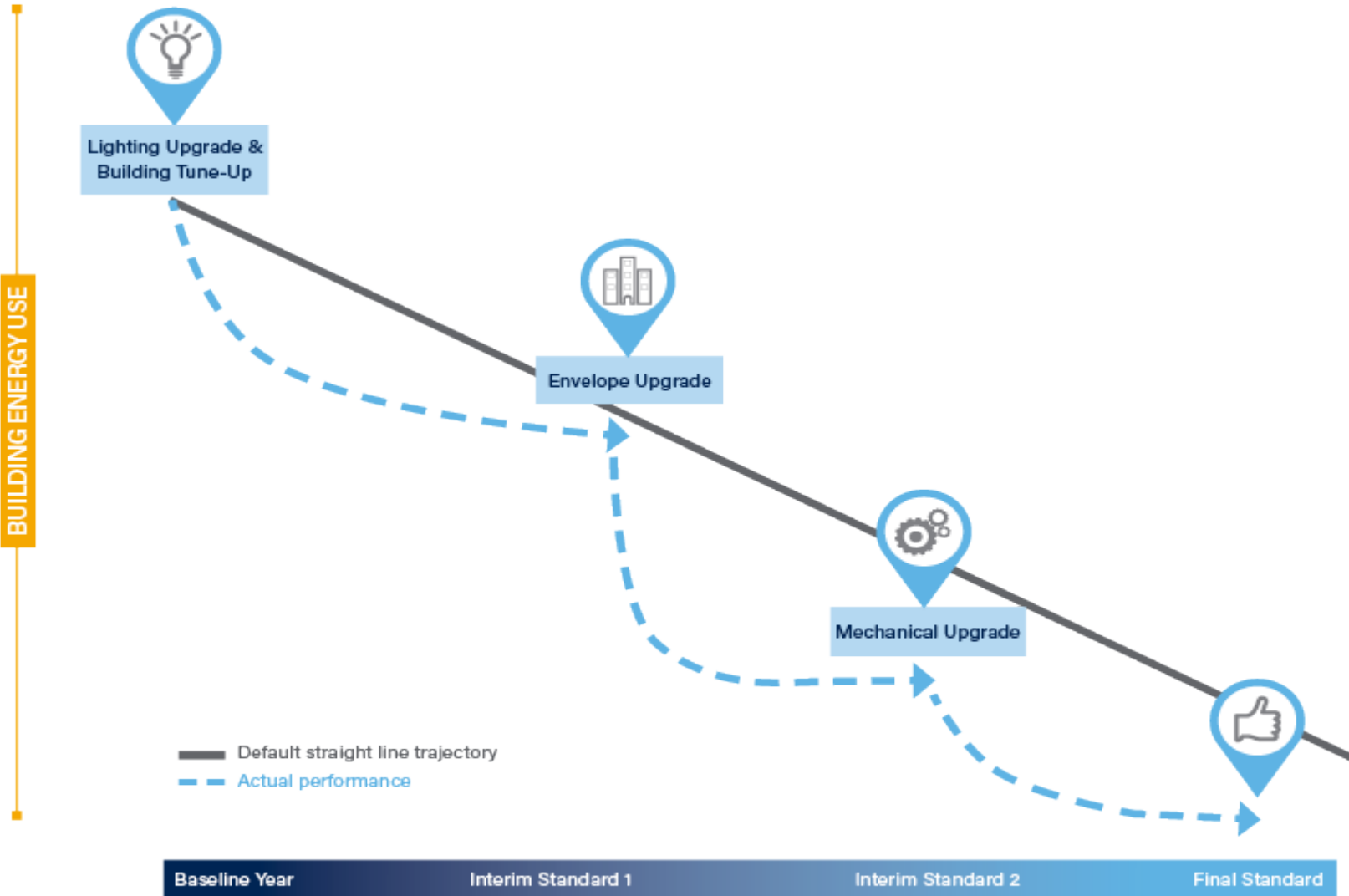


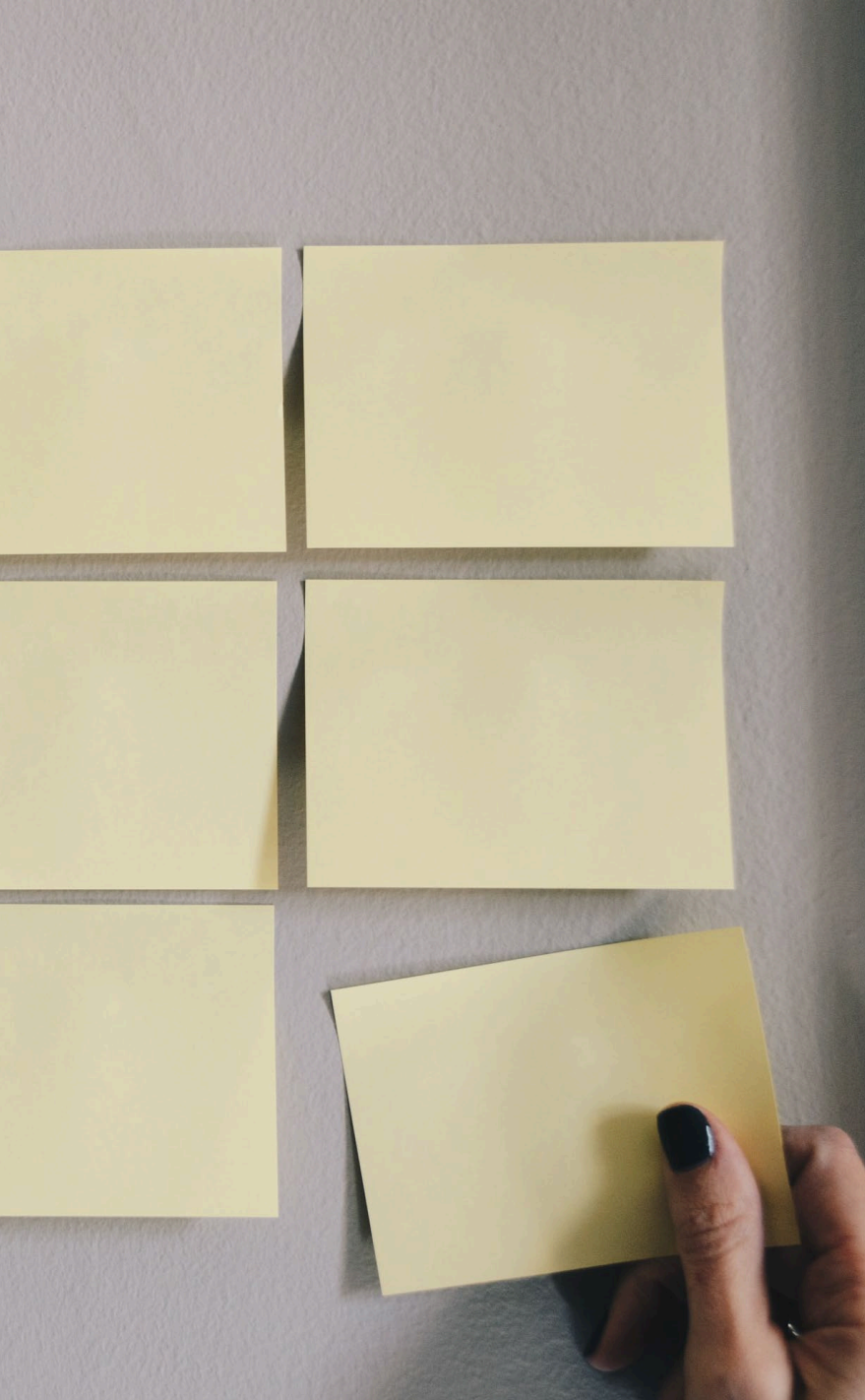
**IMT's Model BPS Ordinance:
Trajectory Model**

Example: Final and Interim Standards for 3 Office Buildings



Compliance Example



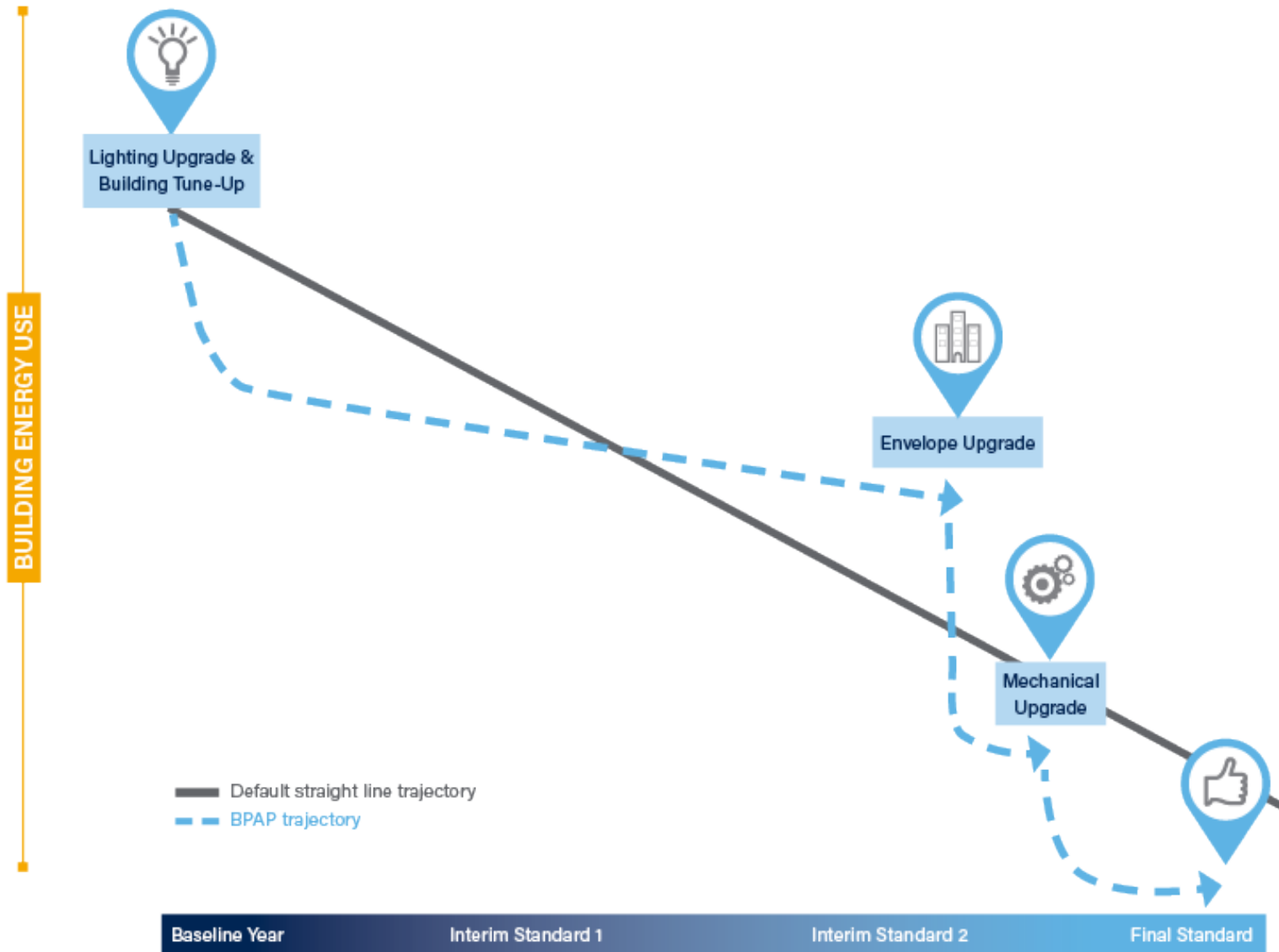


Compliance Details

Alternative Compliance Option:

Building owners seeking additional flexibility may propose a detailed **Building Performance Action Plan** to create customized requirements for a building

BPAP Example: Building Ahead on Compliance





Exploring Building Performance Standards: imt.org/bps