

Building Performance Standards 101:

Understanding & planning for emerging regulations



OUR SPEAKERS



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35

“In the U.S., buildings are the largest contributor to greenhouse gas emissions, representing **~35% of total energy-related emissions**. This is split almost evenly between commercial & residential buildings.”

- National BPS Coalition

Types of compliance reporting



Benchmarking

I need to report to the government;
penalty/fine for not reporting
regardless of performance

47 currently active



Enhanced Benchmarking

I need to report to the government;
required action (RCx; Energy Audit),
can be time-based or punitive

13 currently active



Building Performance Standard

I need to report to the government;
failing to meet targets results in
financial penalties/fines

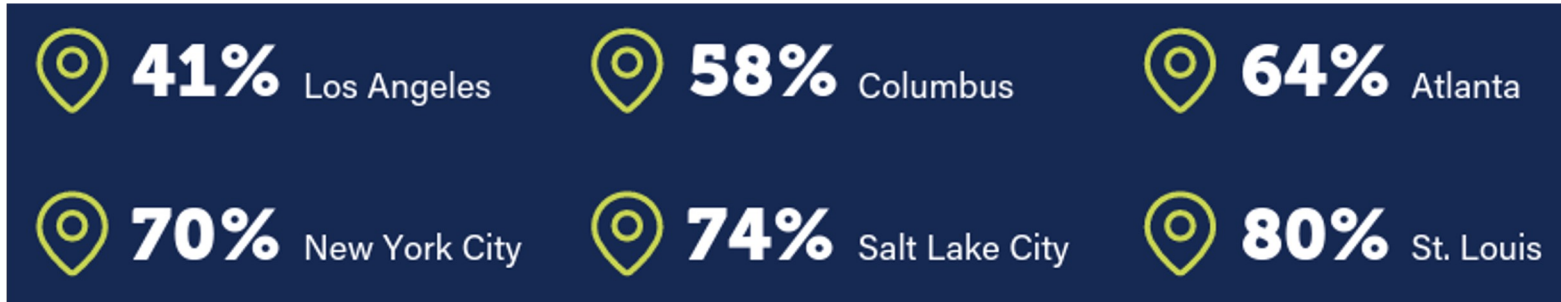
10 currently active

What are Building Performance Standards?

- A new policy tool that establishes regulations requiring existing buildings to meet carbon or energy performance targets by certain deadlines
- Typically passed at the local (city) level, but increasingly states are enacting BPS laws
 - 600+ local US jurisdictions have some type of GHG reduction target, not all BPS
- Unlike Benchmarking laws, failure to comply can result in significant financial penalties

Why BPS?

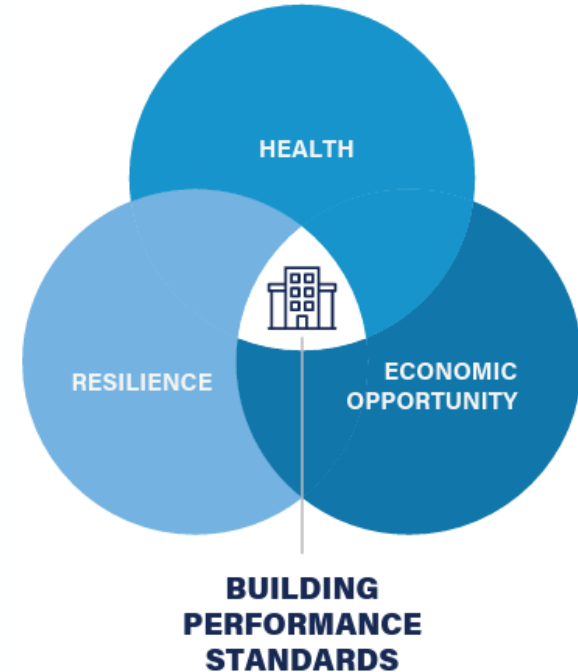
- Buildings account for ~35% of annual GHG emissions in the US
- In some cities, it's a lot more:



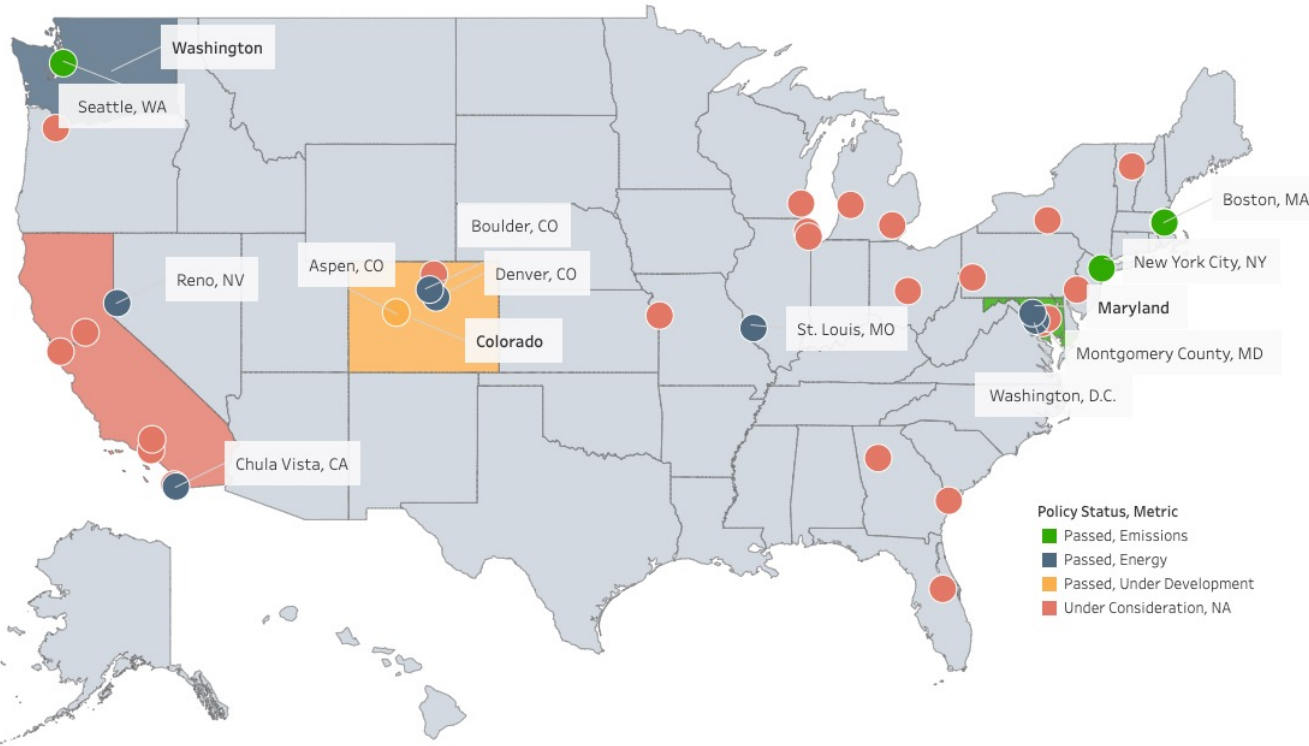
- Government leaders use BPS primarily to reduce building energy use and GHG emissions
 - But there are ancillary benefits!

Benefits of BPS

- Climate Change Mitigation
 - 20% reduction in energy use → 1 million TONS of CO₂e
- Improving Communities
 - Energy burdens higher on low-income households
- Lower bills / better IAQ
 - Modern HVAC use less energy & provide better air quality
- Creating jobs
 - Local contractors benefit from BPS opportunities



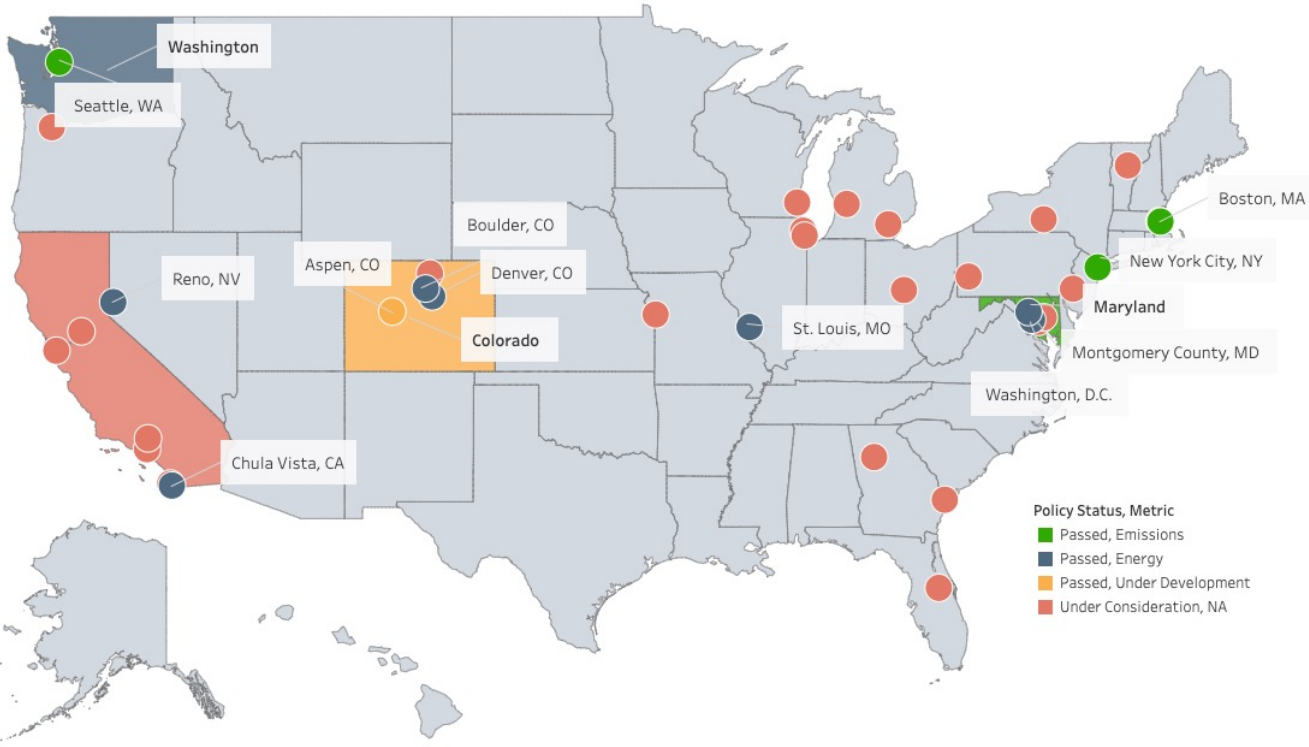
Active BPS laws



Jurisdictions with active BPS laws

- New York, NY
- Boston, MA
- Washington, DC
- Denver, CO
- Boulder, CO
- Washington (Statewide)
- St. Louis, MO
- Chula Vista, CA
- Reno, NV (Voluntary)
- Seattle, WA

Developing BPS laws



Jurisdictions with BPS laws in Development

- Aspen, CO
- Colorado (Statewide)
- Maryland (Statewide)
- Montgomery County, MD
- Oregon (Statewide)

Jurisdictions with BPS laws in Pre-Development

- Ann Arbor, MI
- Annapolis, MD
- Atlanta, GA
- Berkeley, CA
- Cambridge, MA
- Chicago, IL
- Columbus, OH
- Evanston, IL
- Fort Collins, CO
- Grand Rapids, MI
- Ithaca, NY
- Kansas City, MO
- Los Angeles, CA
- Los Angeles County, CA
- Milwaukee, WI
- Orlando, FL
- Philadelphia, PA
- Pittsburgh, PA
- Portland, OR
- Prince George's County, MD
- Sacramento, CA
- San Diego, CA
- San Francisco, CA
- Savannah, GA
- California (Statewide)

Challenges



Unique

Each BPS law is different with their own coverage criteria, compliance pathways, deadlines, & penalties



Nuanced

Subtleties and changes in the laws make them difficult to navigate without expert guidance



Complicated

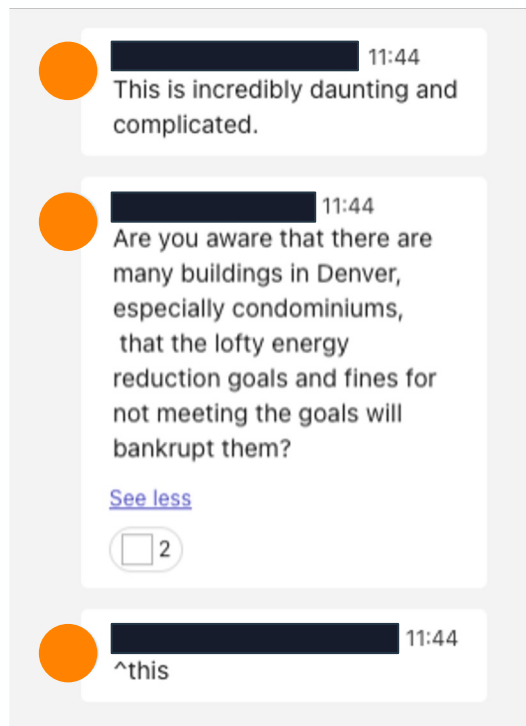
While some laws simply require a single metric like ENERGY STAR score, others require complex calculations to comply

Don't believe us?

Feedback from Denver's info session
(one of the less complex laws)

*"...we may take a step back and
adjust the program..."*

- Energize Denver Official



The screenshot shows a chat interface with three messages. Each message is preceded by an orange circular icon. The first message is from a redacted user at 11:44 and says "This is incredibly daunting and complicated." The second message is also from a redacted user at 11:44 and asks, "Are you aware that there are many buildings in Denver, especially condominiums, that the lofty energy reduction goals and fines for not meeting the goals will bankrupt them?" Below this message is a blue link labeled "See less" and a small square icon containing the number "2". The third message is from a redacted user at 11:44 and says "^this".

11:44
This is incredibly daunting and complicated.

11:44
Are you aware that there are many buildings in Denver, especially condominiums, that the lofty energy reduction goals and fines for not meeting the goals will bankrupt them?

[See less](#)

2

11:44
^this

How BPS laws work

- Typical coverage criteria defined around:
 - Property Type (commercial, industrial, multifamily, etc.)
 - Property Size (GSF, with larger buildings prioritized)
- Typical potential exemptions:
 - Portion of affordable or rent-controlled housing
 - Officially designated historical buildings/landmarks
 - Government buildings
 - New construction/under construction/slated for demolition/recent retrofits
- Typical target metrics (can vary by property type/size):
 - EUI (kBtu/sf/year)
 - WN EUI (same but weather-normalized)
 - GHG Intensity (kgCO₂e/sf/year)
 - ENERGY STAR score

How BPS laws work

- Typical compliance pathways:
 - Performance against your own baseline
 - Performance toward an established target
- Typical compliance procedures:
 - Annual/periodic submission requirements that get more stringent over time
 - Grouped or tranching properties based on type and size
 - Non-uniform compliance processes/tools (ESPM, custom forms, etc.)
 - Some jurisdictions require third-party validation for compliance submissions
- Typical alternative compliance pathways:
 - Submit your own proposal (for properties which cannot comply for valid reasons)
 - Purchase RECs
 - Retrofits and RCx
 - Alternative compliance payments (e.g. Boston)

Example BPS law - BERDO 2.0

BERDO 2.0

(Section 7-2.2; City of Boston Code)

Coverage Area:

Boston, MA

Description:

BERDO 2.0 is a municipal law that gives the City authority to set **carbon emissions standards** for large buildings. The carbon emissions standards will become increasingly stringent over time, with all BERDO buildings needing to achieve net zero emissions by 2050. The Boston, MA Benchmarking Compliance Ordinance still requires large buildings to report their annual energy and water performance to the City, which then makes the information publicly available. BERDO 2.0 also includes new reporting requirements that are reflected in this guide.

Coverage Criteria:

All Buildings in Boston 20,000+ ft². Compliance deadlines and penalties are dependent on Property Type (Residential vs. Non-Residential) and Property Size.

Group 1 (Large): Properties 35,000+ ft² or 35+ units (for Residential) and Non-Residential properties with two or more Buildings on the same parcel 100,000+ ft²

Group 2 (Small): Properties 20,000 - 35,000 ft² or 15-35 units (for Residential)



Non-Compliance Penalty:

Group 1 (Large): \$1,000 / day per Property for non-compliance

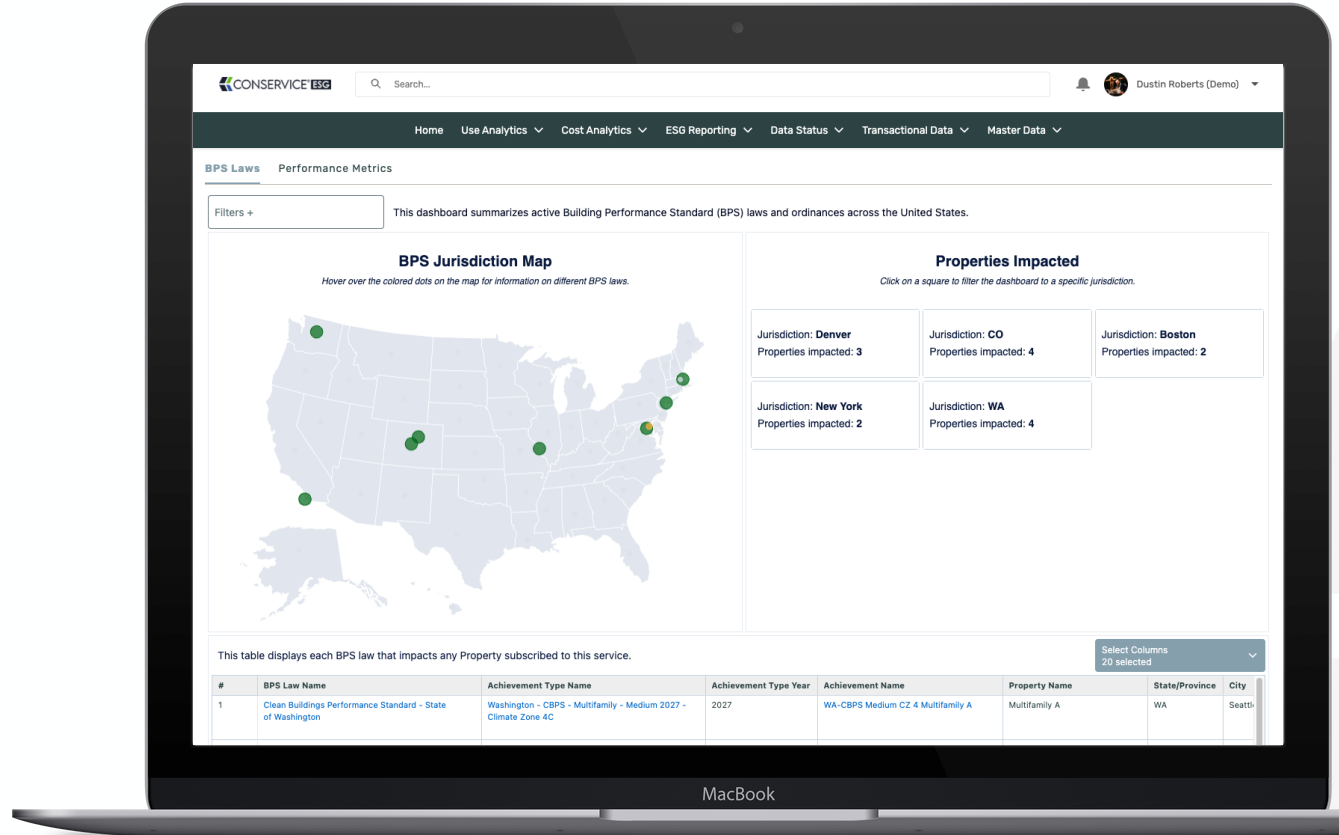
Group 2 (Small): \$300 / day per Property for non-compliance

Example BPS law - BERDO 2.0

Building use	Emissions standard (kgCO2e/SF/yr.)					
	2025-2029	2030-2034	2035-2039	2040-2044	2045-2049	2050
Assembly	7.8	4.6	3.3	2.1	1.1	0
College/University	10.2	5.3	3.8	2.5	1.2	0
Education	3.9	2.4	1.8	1.2	0.6	0
Food Sales & Service	17.4	10.9	8	5.4	2.7	0
Healthcare	15.4	10	7.4	4.9	2.4	0
Lodging	5.8	3.7	2.7	1.8	0.9	0
Manufacturing/Industrial	23.9	15.3	10.9	6.7	3.2	0
Multifamily Housing	4.1	2.4	1.8	1.1	0.6	0
Office	5.3	3.2	2.4	1.6	0.8	0
Retail	7.1	3.4	2.4	1.5	0.7	0
Services	7.5	4.5	3.3	2.2	1.1	0
Storage	5.4	2.8	1.8	1	0.4	0
Technology/Science	19.2	11.1	7.8	5.1	2.5	0

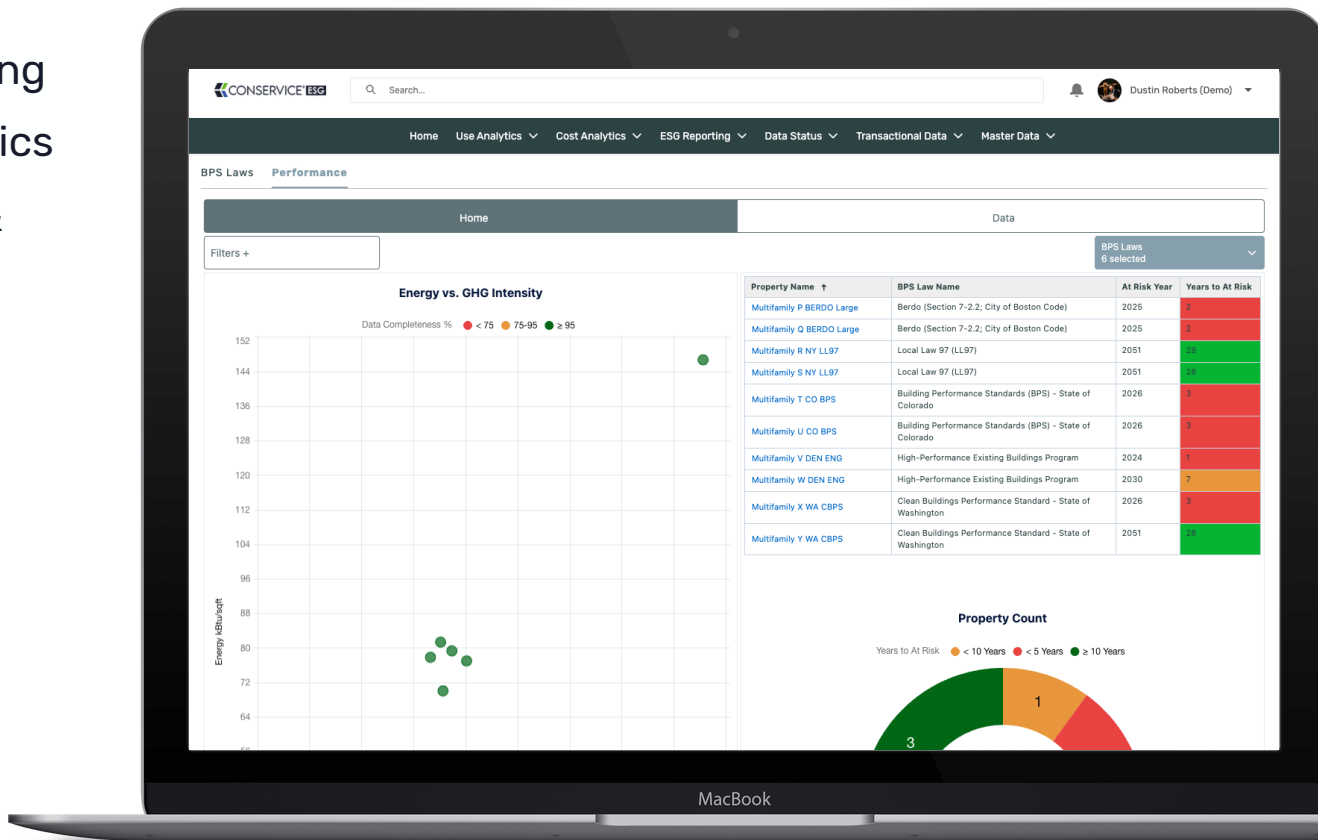
Conservice ESG Solution

- Identification
- Validation
- Compliance



Conservice ESG Solution

- Performance Tracking
- Comparative Analytics
- Risk Identification & Mitigation



QUESTIONS?



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For more info on Conservice's BPS services, contact us at esgsales@conservice.com

Stay up-to-date emerging BPS laws: esg.conservice.com/bps