

Sustainable Finance & Advisory

Navigating an Increasingly Complex
Landscape of Sustainable Building Standards

From high borrowing costs and escalating insurance premiums to subdued lender appetite, real estate operators have a lot to worry about. In an already complex environment, commercial real estate operators are also having to grapple with sustainability initiatives and how to improve building performance. Pressures are threefold:

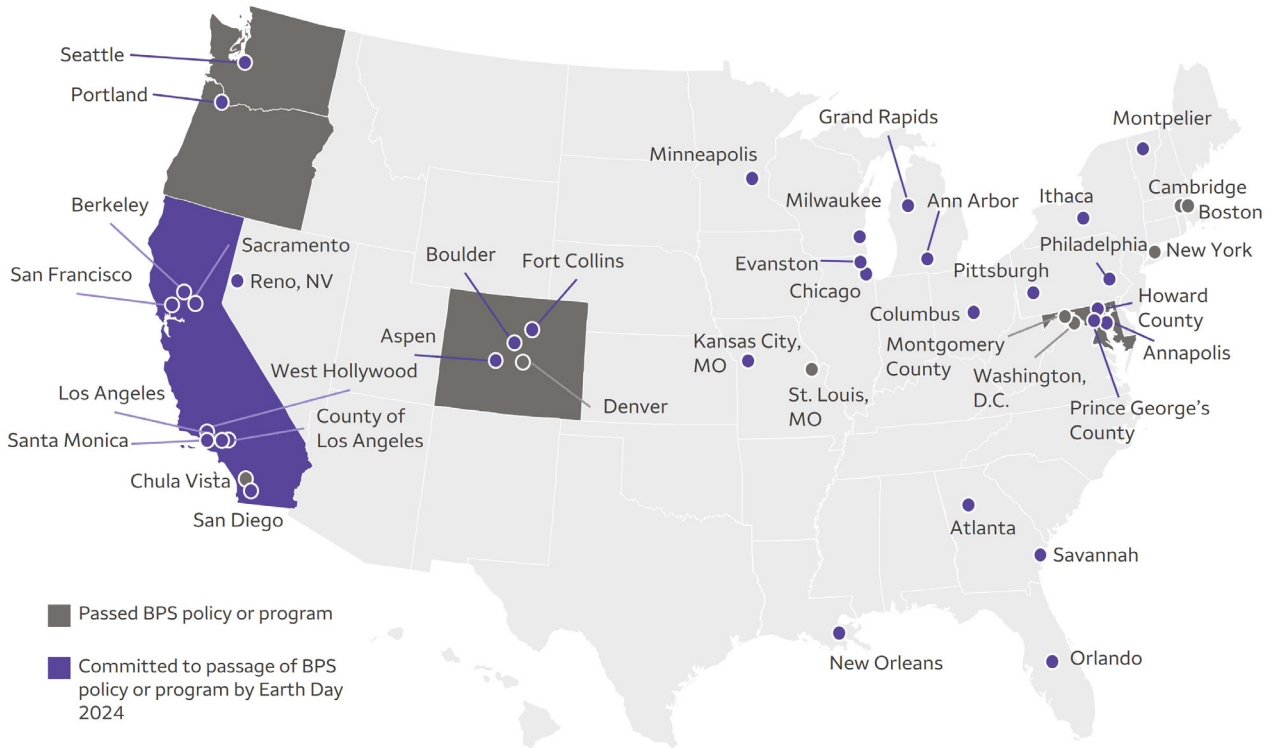
- (1) tenants are increasingly concerned about climate change and meeting their own public sustainability commitments;
- (2) investors are considering environmental, social, and governance factors in their investment decisions; and
- (3) regulators, from the SEC to local governments, are working to implement sustainability disclosure laws and policy change.

Lack of federal policy regarding sustainable real estate and building practices has driven state and local governments to enact building performance standards, and the National Building Performance Standards Coalition is leading the charge.

The National Building Performance Standards Coalition was launched by the White House in 2022 and seeks to accelerate sustainability momentum by implementing localized building performance standards across the United States. Coalition members include states, counties, and cities that have committed to adopting building performance standards and complementary programs including benchmarking, utility data access laws, and new building code upgrades. The first cohort targeted implementation by Earth Day 2024, with the second cohort to follow in 2026. Members are supported by federal agencies, labor organizations, and non-governmental organizations to create building performance standards that align emissions, electrification, and equity goals with retrofit requirements. The following map¹ illustrates coalition members and their current status regarding the passage of building performance standards in their jurisdictions.

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With nearly fifty jurisdictions on board as signatories, a significant portion of the United States is expected to have some type of building performance legislation within the next 2-3 years. The impacts of these building performance standards are expected to be significant, with the Institute for Market Transformation projecting \$124 billion in cumulative investments and annual CO₂e reductions by 2040, equivalent to the annual emissions from more than 5.4 million homes in coalition jurisdictions.

While these building performance standards will clearly drive investment in more sustainable buildings,

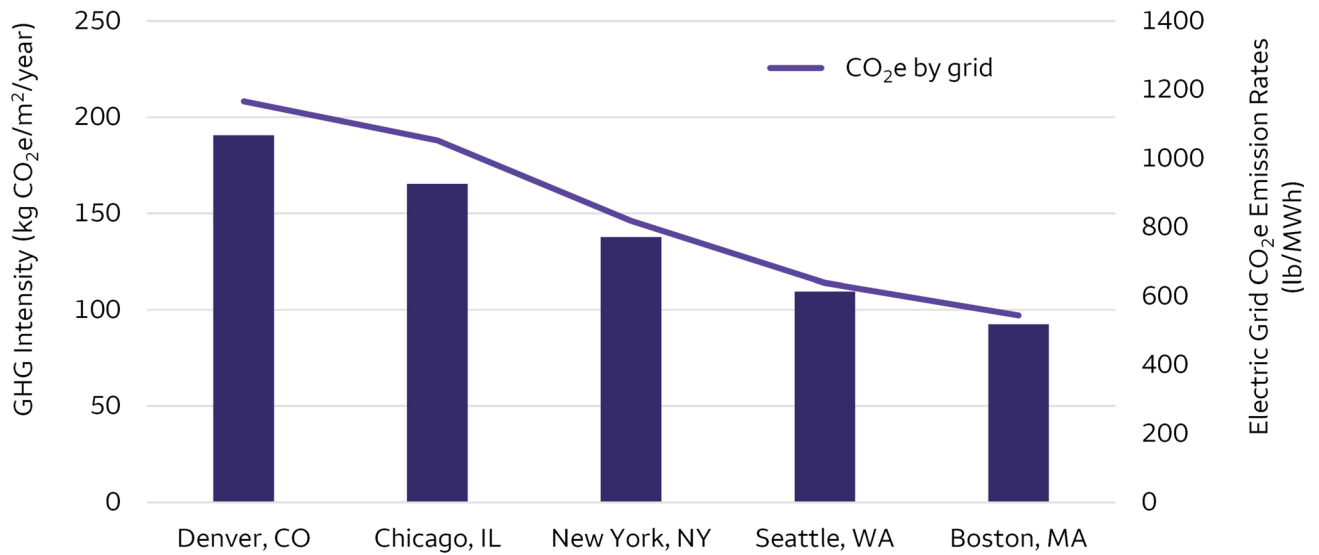
they do vary significantly by jurisdiction, which may be challenging for building owners, operators, and investors with national portfolios. Some jurisdictions have building performance standards focused on greenhouse gas (GHG) emissions, which include carbon dioxide, methane, nitrous oxide, and fluorinated gases. GHG emissions can vary across jurisdictions that have different electricity grid compositions, largely driven by the percentage of grid renewable energy. Other jurisdictions are more concerned about energy use intensity (EUI), which is measured as energy use per square foot and is more dependent on energy efficiency and other factors including climate zones.

The Grid Matters

To highlight the significance of grid composition, Wells Fargo partnered with Helios Exchange, a building analytics platform focused on energy efficiency, decarbonization, and energy retrofit project development, to analyze grid composition across major cities in the United States. The analysis examined data from an office property in New York City, which has a climate characterized by moderate temperatures (Climate Zone 4) and looked at GHG emissions as if the building were in other cities with a similar

climate (Climate Zones 4 and 5) across the United States. Unsurprisingly, the results show that the same property reports lower emissions in cities with grids that have a higher percentage of renewable energy such as Boston and Seattle as compared to more fossil fuel dependent grids like those in Denver and Chicago. CRE operators need a deeper understanding of grid composition and utility specific decarbonization plans since this could directly impact fines if tied to GHG emissions, and ultimately property values.

GHG Emissions Across Cities in Similar Climates²



Complex landscape of Building Performance Standards (BPS) across jurisdictions

The associated fines for the different building performance standards vary across jurisdictions, so understanding specific building performance standards exposure is imperative to staying in compliance and avoiding potentially costly fines.

Figure 1: Select building performance standards and associated penalties

Jurisdiction	Covered Buildings	Requirements	Penalties
New York City Local Law 97 ³	New and existing buildings larger than 25,000 sf	Annual GHG emissions targets/caps	Failure to Report: \$0.50 per sf per month Failure to Meet Target: \$268 per tCO ₂ e above target
Boston Building Emissions Reduction and Disclosure Ordinance ⁴	Non-residential buildings 20,000 sf or greater and residential buildings with 15 or more units	Annual GHG emissions targets/caps	Failure to Report: \$150-\$300 daily Failure to Meet Target: \$300-\$1,000 daily or \$234 per tCO ₂ e above target
Washington, D.C. Building Energy Performance Standard ⁵	All privately owned buildings 10,000 sf or greater	ENERGY STAR score no lower than the district median	Failure to Comply: \$10 per sf, max penalty \$7,500,000
Seattle Building Energy Performance Standard ⁶	Multifamily and nonresidential buildings larger than 20,000 sf; industrial and manufacturing buildings are exempt	Energy Use Intensity (EUI) targets	Failure to Report: \$7,500-\$15,000 Failure to Meet Target: \$2.50-\$10.00 per sf
Denver Energize Denver and Green Buildings Ordinance ⁷	All buildings larger than 25,000 sf, separate requirements apply for smaller buildings	Energy Use Intensity (EUI) targets	Failure to Report: \$2,000 Failure to Meet Target: \$0.30-\$0.70 per kBtu

2. Wells Fargo Securities and Helios Exchange Analysis, Selected property was 1.6MM ft2

3. Government of NYC, "Greenhouse Gas Emission Reporting"

4. Government of Boston, "Building Emissions Reduction and Disclosure"

5. District of Columbia Department of Energy and Environment, "Building Energy Performance Standard"

6. Government of Seattle, "Seattle Building Emissions Performance Standard"

7. Government of Denver, "Energize Denver Hub"

To provide a direct comparison of the building performance standards across different cities, Wells Fargo and Helios Exchange analyzed data from four existing buildings in New York City representing different asset types and applied the standards from the cities referenced above. For purposes of this simulation, EUI was held constant across the different

cities. The scenario analysis demonstrated a wide variation in fines across cities. Although NYC's LL97 gets disproportionate attention, our analysis indicated significantly higher fine potential in Denver, Seattle, and Washington, D.C. Findings are summarized in the below graphs.

Figure 2: Estimated 2030 BPS Fines across Jurisdictions

Fines Assessed Annually⁸

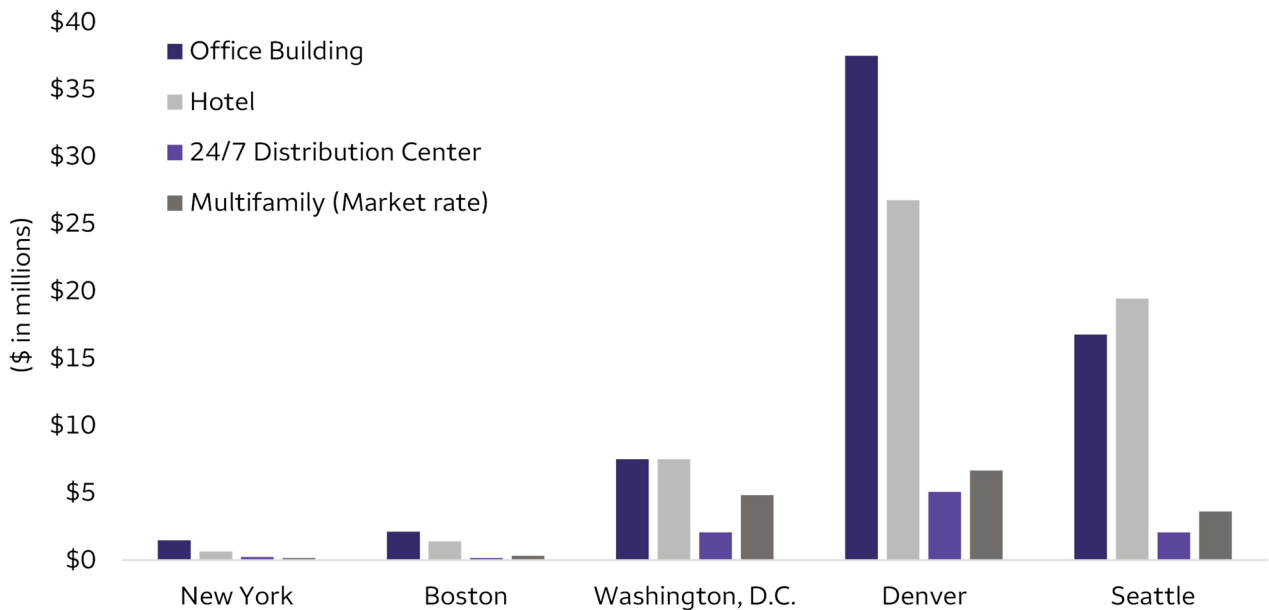
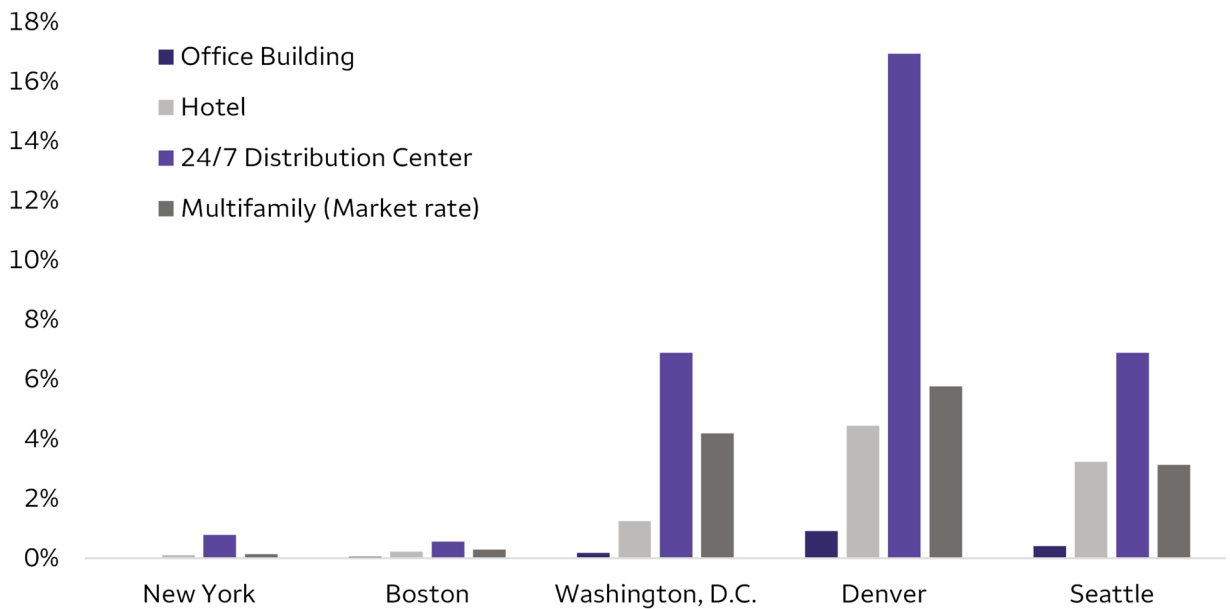


Figure 3: Estimated 2030 BPS Fines across Jurisdictions (% of Property Value)

Fines as % of Property Value⁸



8. Wells Fargo Securities and Helios Exchange Analysis; Year of assessment varies, the charts reflect New York, Boston, and Denver in 2030, Washington in 2027, and Seattle in 2031; Selected properties are of the following sizes: Office – 1.6MM sf, Hotel – 1.9MM sf, 24/7 Distribution Center – 207,000 sf, Multifamily – 480,000 sf

While the previous analysis is focused on the United States, there are other jurisdictions similarly adopting building performance standards. Canadian cities such as Montreal, Toronto, Vancouver, and Ontario have implemented by-laws that require mandatory reporting around energy use, water use, and/or GHG

emissions for in-scope buildings. While Vancouver is currently the only city in Canada that fines building owners for exceeding their emissions and heat energy caps, other jurisdictions are inching towards more stringent building performance standards.

Jurisdiction	Covered Buildings	Requirements	Penalties (\$CAD)
Montreal By-law 21-042 ⁹	Any building $\geq 2,000\text{m}^2$ or with 25 or more dwelling units	GHG emissions data reporting	Failure to Report: \$1,000 for first offence, \$2,000 for second offence, \$4,000 for each additional offence
Toronto Proposed Building Emissions Performance Reporting By-Law ¹⁰	Buildings $\geq 4,645\text{ m}^2$ in 2024, Buildings $\geq 929\text{ m}^2$ in 2025	Energy consumption and water use data reporting	To be determined
Vancouver Annual Greenhouse Gas and Energy Limits By-law ¹¹	Commercial buildings $\geq 100,000\text{ sf}$ (size ratchets down to 50,000 sf)	Annual CO ₂ e emissions caps and annual heat energy limits	\$500 plus \$350 per ton of CO ₂ e above cap and \$100 per GJ for heat energy above limit
Ontario Reporting of Energy Consumption and Water Use ¹²	Buildings $\geq 50,000\text{ sf}$	Energy consumption and water use data reporting	N/A

As North America continues to adopt building performance standards across jurisdictions, the United Kingdom has implemented Minimum Energy Efficiency Standards (MEES) Regulations. Under these regulations, commercial properties are required to obtain an Energy Performance Certificate (EPC), which is a rating of a property’s energy efficiency on a scale from G (worst) to A+ (best, net zero). As of April 1, 2023, all privately rented commercial properties must obtain an EPC of E or better unless a property qualifies for an applicable exemption, in which case it must register that exemption. Failure to meet an

EPC E or better, or register an exemption, can lead to a compliance notice, financial penalty, and/or inability to continue to let the property. There is also an expectation that further changes to the MEES regulations will occur, which are likely to raise the minimum EPC to D or better by 2025, C or better by 2027, and B or better by 2030.

While this methodology is slightly different than the building performance standards that exist in the U.S. and Canada, it nonetheless highlights the potential exposure to financial risk due to noncompliance.

Climate risk and BPS compliance is likely to factor into capital availability

While understanding fines and retrofit costs are highly important for building owners, they are also becoming increasingly important for lenders. Lenders are beginning to factor climate risk into underwriting considerations, with some deploying sustainability questionnaires to better understand climate risk unique to the transaction. Some climate-focused

investors are specifically looking for investments where the borrower has established plans to deploy capital expenditures for sustainability retrofits and improvements. If a borrower is not sufficiently prepared for forthcoming building performance standards, this elevated risk is likely to be considered during the underwriting process.

9. Montreal Government, “[By-law concerning greenhouse gas emission disclosures and ratings of large buildings](#)”

10. Toronto Government, “[Update on Implementation of Net Zero Existing Buildings Strategy](#)”

11. Vancouver Government, “[Annual Greenhouse Gas and Energy Limits By-Law](#)”

12. Ontario Government, “[Reporting of Energy Consumption and Water Use](#)”

As building performance standards proliferate and drive elevated transition risk, property owners and lenders will need to quickly understand exposure and underwrite a path forward. CBRE estimates that to achieve a carbon reduction of 75%, a property owner can expect to pay \$46 per sf on average.¹³ As capital demands are increasingly tied to building retrofits, it

is likely that green and sustainability-linked bonds and loans will be leveraged for reduced financing costs and increased stakeholder signaling.

Wells Fargo's Sustainable Finance & Advisory team is available to support clients in developing customized solutions that support more efficient and sustainable building performance.

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