

Updates from the Frontier: Lessons Learned from Early BPS Adopters and Implications for California's Statewide Policy

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ABSTRACT

In recent years, the first building performance standards across the United States have finally transitioned from the design phase to the implementation phase. We now have access to the first years of compliance data, as well as qualitative reports from jurisdictions like New York City, Denver, Oregon, and Washington state. This data contains valuable insights – successes, failures, unexpected results, and more – which can be used to design more effective, resilient, and equitable BPS for the next wave of jurisdictions, including larger targets like the state of California.

This paper presents a comprehensive review and reflection on “the good, the bad, and the ugly” of the Building Performance Standards across the US that are currently in the implementation phase. The early jurisdictions that have launched a BPS have all taken slightly different strategies, from different metrics (GHG, EUI) to different compliance pathways, to different covered buildings. Some cities and states have also reconsidered some of their design decisions as they seek to improve their BPS policies. In mapping these jurisdictions’ BPS design decisions to early results, other jurisdictions can learn from these natural experiments, these test beds of BPS policy around the country, and make more effective decisions in the next wave of Building Performance Standards being designed today.

Introduction

A building performance standard (BPS) is a regulatory framework designed to reduce energy use and greenhouse gas emissions from buildings. BPS policies require owners to report measured building performance and establish maximum energy- or emissions-based thresholds that buildings must meet by specified compliance deadlines. Most BPS policies also include alternative compliance pathways that provide flexibility for buildings unable to meet the standard thresholds, such as through building assessments and customized retrofit or decarbonization plans that inform adjusted targets or extended compliance timelines.

As of this paper, twelve BPS policies have been adopted across multiple jurisdictions, addressing energy use, emissions, or both, with several additional policies currently under development. Several review papers have already summarized the core characteristics and approaches of BPS policies around the country (Nadel 2023, Engelmann et al 2024). This paper will build on the established body of work by diving into five topics which have become more important in the implementation phase of these BPS policies – State/Local BPS Overlap, support and staffing, pairing GHG and efficiency metrics, designing a defensible BPS, and compliance fees. This work is informed by the latest BPS literature, as well as interviews with city/state

officials who have been at the forefront of BPS in the US. Given their direct involvement in policy design and implementation, these officials were able to provide highly detailed and insightful accounts from the field, which have yet to be unpacked in the BPS literature.

State / Local BPS Overlap

Building energy codes define minimum requirements for the design and construction of new buildings or major renovation of existing buildings, to ensure they use energy efficiently. Energy codes regulate building features such as insulation, windows, lighting, HVAC systems, and controls, establishing minimum efficiency requirements for new construction and major renovations. Building energy codes are generally adopted and enforced at the state or local level (USDOE 2012). When a building is subject to both a state energy code and a local energy code, the generally accepted rule is that the more stringent code governs within that jurisdiction. State building or energy codes establish minimum efficiency standards that apply across the state, and many states authorize local governments to adopt energy codes that are at least as stringent — or more stringent — than the state minimum. Local jurisdictions may incorporate the state code by reference and then adopt additional or stricter requirements, but they may not adopt amendments that are less stringent than the statewide standard where the law prohibits such weakening (Cohan 2026, U.S DOE 2012). Once a local jurisdiction adopts its own energy code or amendments that exceed the state requirements, those locally adopted provisions become the enforceable standard within that jurisdiction, and conflicts between the codes are typically resolved in favor of the more stringent local requirements. BPS operate somewhat differently from building energy codes. While energy codes typically follow a clear hierarchy (e.g., a local energy code can never be less stringent than a state code but can be more stringent in certain areas) the relationship between state and local BPS policies is often less uniform.

The absence of a national model code which could form the basis of the state and/or local energy code or the use of different compliance metrics adds additional challenges to this dynamic. One program may regulate site energy use intensity (EUI), and another may use greenhouse gas emissions intensity (GHGi). Because these metrics measure different outcomes and might rely on different baseline years, it can be difficult to directly compare “stringency” between a state and local BPS. Evaluating which BPS is “more stringent” requires careful analysis of metrics, compliance timelines, and alternative compliance pathways.

In this section, we examine several case studies of state and local BPS overlap, each with their unique set of issues and key takeaways.

Seattle & Washington State

Washington State and Seattle offer a compelling example of highly coordinated policy development between state and local governments. Washington State and Seattle officials have worked proactively to align standards and streamline reporting. The state’s Clean Buildings Performance Standard (CBPS) and Seattle’s Building Emissions Performance Standard (BEPS) were developed in close collaboration, with clear communication between agencies to ensure that building owners wouldn’t face conflicting requirements. Instead of duplicative mandates,

Seattle's BEPS effectively extends the state's framework by applying emissions-based targets to buildings between 20,000 and 50,000 ft², a tier not covered by the state's initial CBPS. However, Washington State's CBPS does not automatically recognize compliance with Seattle's BEPS as meeting state requirements. Although the two policies are complementary, they differ in structure, metrics, and compliance obligations. The state CBPS is an energy-based standard focused on meeting energy use intensity (EUI) targets and implementing energy management practices, while Seattle's BEPS is an emissions-based policy focused on reducing greenhouse gas intensity (GHGi). Each program has its own reporting processes, documentation requirements, performance targets, and compliance timelines. As a result, building owners in Seattle must ensure they meet both the state and local requirements independently. While benchmarking data and efficiency improvements may support compliance with both standards, satisfying one policy does not automatically constitute compliance with the other.

In 2025, House Bill 1543 (WA 2025a), provided Washington the authority to “develop targets for alternative metrics related to energy use and greenhouse gas emissions if such metrics are included in Standard 100-2018 or subsequent versions.” Standard 100-2024 includes targets for GHGi, however, those were not adopted during the rulemaking process. Washington introduced additional compliance pathways which promote and encourage electrification through its “prescriptive electrification” approach, which could eventually support compliance with Seattle's emissions metric (WA 2025b).

Denver & Colorado

As with the Seattle/State of Washington policies, Denver and Colorado have policies that use GHG for compliance at one level and EUI for compliance at another level. The Energize Denver Building Performance Policy was passed in 2021 but had several updates in 2025 (City of Denver 2022, City of Denver 2025). The policy covers buildings as small as 5,000 ft² but has more stringent requirements for those over 25,000 ft². Denver uses an EUI metric.

Building Performance Colorado (BPC) was passed in 2021, and covers public, commercial, and multifamily buildings over 50,000 ft². Owners have an option to choose either an EUI or a GHGi target for their compliance pathway, but those who do not make a selection are by default assigned to the energy efficiency compliance pathway (State of Colorado 2023).

Recent legislation in Colorado (HB 25-1269) has introduced additional flexibility, such as making the 2026 performance targets voluntary and allowing the use of 2019 as an alternative baseline year to account for pandemic impacts, as well as enabling the Colorado Energy Office to better coordinate state and local standards (State of Colorado 2025). As a result of these recent amendments, Colorado now accepts compliance with Energize Denver as deemed compliance with the State's policy (City of Denver 2026). Building owners will no longer need to track and meet separate State and local performance targets. Approved target adjustments, timeline extensions, or other alternate compliance options granted by Energize Denver are acceptable to Colorado Energy Office (CEO) and will not prevent a building from achieving compliance with BPC.

Portland & Oregon

Portland's HEART Standards are a proposed set of "climate and health standards" for existing buildings that go beyond traditional energy or carbon performance requirements by explicitly incorporating community-centered health, equity, and resilience goals (City of Portland 2023). The acronym HEART stands for:

- Healthy housing — reducing indoor air pollution to improve occupant health
- Equitable energy — setting energy efficiency and emissions goals that help reduce cost burdens and lower carbon emissions
- Anti-displacement — aligning improvements and investment with protections to avoid displacing tenants
- Resilience — improving building resilience to hazards such as power outages
- Temperature — ensuring indoor thermal comfort and safety during extreme heat events

These standards are intended to apply primarily to rental apartments and larger multifamily and commercial buildings, setting minimum performance requirements for carbon emissions, indoor air quality, and indoor temperature over a multi-decade timeline, with the goal of net-zero emissions by 2050. The HEART approach is designed to be flexible and customizable, allowing owners to meet performance targets in ways that suit their buildings while ensuring benefits flow to historically disadvantaged communities.

Oregon's BPS requires covered buildings to compare their EUI to a target EUI (EUI_t) and submit required documentation to the Oregon Department of Energy (ODOE). Tier 1 buildings face more comprehensive requirements than Tier 2 buildings: they must identify and meet their EUI_t by the compliance date, report building energy use data, and develop and maintain an Energy Management Plan and an Operations and Maintenance program (State of Oregon 2025b). If unable to meet the EUI_t, a Tier 1 building owner must conduct an energy audit and implement cost-effective efficiency measures. In contrast, Tier 2 buildings owners must identify the building's EUI target and submit 12 months of energy use/EUI data by July 1, 2028.

Oregon, in its state law (ORS 469.277) explicitly allows local governments to adopt their own standards by local ordinance (or rule/land use process), with conditions (State of Oregon 2023). ORS 469.277(5) says a municipality may adopt (by ordinance, rule, or land use process) an energy performance standard and greenhouse gas emission reduction standards that are more stringent or have broader application than the state's standard—so long as certain conditions are met (State of Oregon 2025b). It also includes a requirement for the municipality to cooperate with ODOE in aligning, where practicable, the energy performance standard the municipality adopts with the energy performance standard adopted by the State. This explicit guidance and requirement in the state law plans allows for greater cooperation between state and local jurisdictions and is an excellent model for other states considering and developing BPS.

Summary

The coordination between state and local BPS is critical, and the elements below need to be considered and mapped in California's SB 48 (State of California 2023), which requires the CEC to develop a strategy for using benchmarking data to track and manage energy and GHG emissions of covered buildings to achieve the state's goals, targets, and standards.

Core considerations for California include:

- Implementation and administrative burden for dually covered buildings.
- Administrative burden for utilities, as buildings in their service territory may be covered by two distinct requirements at the state and local level.
- Potential confusion from a building owner/portfolio owner who is required to optimize for dual metrics, targets, and/or Alternative Compliance Pathways (ACPs).
- Competing investment priorities for dually covered buildings (e.g., efficiency vs electrification, vs low-carbon electricity products for buildings with both GHGi and EUI targets).

Opportunities for Streamlining

State and local jurisdictions can coordinate and streamline policy from multiple perspectives to facilitate implementation and compliance for the building and portfolio owner. The following are some opportunities for state and local jurisdictions to streamline development and implementation of BPS policies:

- Streamlining on benchmarking platform, utility data access and building identifiers. In most cases, EnergyStar Portfolio Manager (ESPM) is the benchmarking data reporting tool of choice and utility data access is facilitated through this tool. ESPM also allows for entry of more than one building ID. In an ideal world, if data is being submitted to more than one jurisdiction, ESPM would include a feature to allow the same building record (or multiple buildings' records) to be submitted for all applicable policies through the same interface.
 - An alternative to this would be a state signing a memorandum of understanding with all local jurisdictions so that data shared with a jurisdiction is automatically also shared with the state without any additional requirements from the building owner.
- Alignment on exceptions, exemptions and definitions. Policies have special provisions, pathways or exemptions for buildings which are financially distressed, unoccupied or historic buildings. Exceptions are also present for buildings which would not otherwise be exempt from the policy but may be dealing with extenuating circumstances. Alignment on definitions and criteria for qualifying conditions would enable buildings to be classified in the same manner for both state and local policies.
- Coordination of utility attribution frameworks at the state, local, and utility levels, across both codes and standards and utility incentive programs.
- Alignment on data reporting and management platforms.
- Alignment on metrics.

Support and Staffing

Implementing a BPS requires significant administrative capacity. Jurisdictions need dedicated staff to manage compliance review, data quality control, IT systems, technical assistance, stakeholder engagement, and enforcement (U.S DOE 2023). Successful programs typically include a program lead, compliance analysts, outreach staff, and enforcement personnel, supported by robust data infrastructure and reporting platforms. Case studies from existing jurisdictions suggest staffing levels often scale to roughly one full-time employee per 250–300 covered buildings (Burton 2025), with sustained funding required to administer reporting, evaluate performance targets, manage penalties, and support equitable implementation over time.

Colorado

Feedback from Colorado Energy Office staff focused on the need for supportive resources for building owners. While they had a robust stakeholder process, they needed to further engage contractors, installers, and energy auditors, and empower them to do work. They also discussed a high volume of tickets through the help desk. Last year, they had 10,000 tickets. They intend to develop more front-end resources, such as playbooks by building type, which they hope will reduce their ticket load. But they emphasized that their vendor has done well handling those tickets.

In terms of implementation resources, the team emphasized their concern that long wait times for support might damage the BPC reputation. Their help desk has been managed by several private companies, first Touchstone and now ICF. They also contract with ClearlyEnergy for access to the BEAM tool (ClearlyEnergy 2026).

New York City

Across the many jurisdictions that were interviewed in this research, staffing for BPS implementations was a common pain point. Many cities find that it takes more staff than anticipated to run a Building Performance Standard program with quality. One expert from NYC claimed that at one point, the city only had 1/17 the staff it needed to enforce Local Law 97, New York City's Building Performance Standard (New York City 2019). Without enough staff to adequately enforce the law, compliance rates will undoubtedly fall, and the impact is blunted.

Beyond enforcement, lack of staffing can also affect the conversation and media coverage around BPS. When pro-BPS analyses and studies have not been commissioned, a vacuum allows moneyed interests to do their own calculations and sow popular discontent with the law, some of which can lead to legal challenges. New York City is working through these issues, and staffing rates have improved, but it is important to equip future jurisdictions for success with sufficient staff, especially in the critical first years of BPS implementation.

Boston

The City of Boston's Building Emissions Reduction and Disclosure Ordinance (BERDO) has evolved over more than a decade of rulemaking and building benchmarking, and it features a unique, multifaceted approach to building owner support that other jurisdictions can learn from.

Notably, BERDO features a Building Decarbonization Advisor Program (BDAP) that uses a cohort structure to assist groups of building owners in a collaborative, time- and resource-efficient manner (City of Boston 2026). Owners that are having difficulty complying with BERDO can apply to the BDAP, and once accepted, they form a group with other building owners around the city. The cohorts are led by consultants contracted by the city to provide support for BERDO, and their effort is funded by a mix of federal funding and BERDO's Equitable Emissions Investment Fund. City officials that we interviewed discussed several benefits of the cohort-based program. The cohorts are selected to include at least one building owner that has successfully complied with BERDO, so owners can learn from their peers as well as the facilitators. This approach enables a single paid staffer to effectively help many more building owners in need, as the more experienced owners in the cohort obviate the need for one-on-one attention from the facilitator. It also enables building owners to connect outside the cohort with trusted peers once they've been introduced, limiting the burden (particularly for follow-up questions) on city staff and paid consultants.

The BDAP is supported by complementary resources, including an online BERDO compliance guide (Berdo Compliance Guide), a BERDO help desk for immediate support with simpler requests, and free one-on-one virtual building consultations which provide individualized guidance outside the BDAP at a reasonable cost to the city (City of Boston 2026). This diverse array of resources increases options for building owners to get help with BPS compliance and relieves administrative burden and bottlenecks. By contrast, other cities with a single form of support for all BPS inquiries (e.g., a help desk) reported an overwhelming volume of requests (tens of thousands of tickets) resulting in high staffing costs and longer wait times for building owners.

Strategies for Streamlining

Discussions with jurisdictions in the implementation stage suggests that there are several aspects to consider and optimize to minimize challenges in policy support and implementation:

1. Reduce help-desk demand with "front-end" self-service which might include:
 - a. Playbooks by building type.
 - b. A single canonical knowledge base (FAQ plus troubleshooting) with all help desk responses (staff plus vendors) to link back to it, so every ticket improves the public resource.
 - c. A tiered support model, for example:
 - Tier 0: self-serve knowledge base plus short videos.
 - Tier 1: vendor-run help desk for routine issues.
 - Tier 2: agency analysts for complex target/adjustment questions.
2. Support implementers in anticipation of workforce gap and challenges. Utilities can be excellent partners for these efforts, by:

- a. Creating contractor/auditor toolkits.
- b. Hosting train-the-trainer sessions for auditors, commissioning providers, and installers, then certifying them as “BPS-ready” (even if informal). This reduces owner confusion and improves submittal quality.
- c. Publishing pre-approved measurement & verification (M&V) methods and sample reports to reduce back-and-forth during compliance review.

Pairing GHG and Efficiency Metrics

This section discusses the importance of metric design and policy alignment in BPS, drawing lessons from New York City and Colorado.

New York City

New York City’s implementation of Local Law 97 (LL97) relies solely on greenhouse gas (GHG) emissions metrics as a building performance tracking and compliance metric. The key risk of relying solely on emissions, without also tracking and requiring improvements in energy efficiency, is potential overuse of renewable energy credits (RECs), without a meaningful improvement in energy efficiency (New York City 2022). California Energy Commission is evaluating a dual-metric approach, in addition to additional metrics, to ensure building performance policies drive meaningful upgrades regardless of grid changes.

- **Sync up statewide policies to preserve impact.** In New York City, the statewide Climate Leadership and Climate Protection Act (NY 2019) significantly undermined the original intent of the local law by nearly halving the carbon emissions factor for electricity (NY 2025). As a result, buildings are now required to do much less to comply. The law was originally designed so that 20% of covered buildings—the worst performers—would need to implement basic retrofits, such as lighting upgrades and control systems. However, once the benchmarking data came in and the emissions factor changed, only about 11% of buildings were out of compliance.

New York State’s Climate Leadership and Community Protection Act (CLCPA) affected LL97 in a few concrete ways. CLCPA requires New York to cut economy-wide GHG 40% by 2030 and ≥85% by 2050 (from 1990 levels), establishing the statewide decarbonization trajectory that LL97 complements at the city/building level. New York’s highest court upheld LL97 against a CLCPA preemption challenge. In *Glen Oaks Village Owners, Inc. v. City of New York* (May 22, 2025), the New York Court of Appeals held the CLCPA does not preempt local regulation of GHG emissions, so LL97 remains valid and enforceable. This reinforced that both state and local can work together towards a shared goal for emission reduction.

- **Targets should be tied to actual building performance.** There are several practical challenges with GHG targets relative to energy-based targets (like EUI). On the building owner/operator side, grid emissions intensity changes can be difficult to forecast and account for alongside building upgrade plans. On the city/state side, mass over-reliance on RECs and offsets can lead to scenarios where compliance is only demonstrated on paper and not through actual performance. For both challenges, backstops which leverage

the fundamental performance of the building rather than external factors like grid emissions intensity are much easier to track and work towards.

Colorado

Clearly, a duplicative compliance burden for owners (as with Colorado and Denver) is problematic, and there are efforts in Colorado to correct that. But given even more widespread commitment by California jurisdictions to develop BPS, the risk and opportunity of misaligned laws is intensified. Currently, AB 802 allows local jurisdictions with their own benchmarking laws to gather AB 802 compliance data for both local (often <50k ft²) and state (AB 802, for buildings >50k ft²) benchmarking requirements and submit to the California Energy Commission (CEC) for the AB 802 subset (State of California 2015).

Were there a mismatch between metrics, this could bring challenges for dually covered buildings. The CEC has expressed interest in being the first dual metric BPS, while all BPS in development have a GHGi target (notably, California's only BPS, Chula Vista, has an EUI metric). Of these in-process jurisdictions, many express an interest in *total* GHGi, which would encourage both electrification of end uses and procurement of low carbon electricity generation. When there is metric misalignment, the concept of guard-rails is more challenging to implement.

Opportunities for Streamlining

Several opportunities exist to streamline building performance metrics between state and local jurisdictions by aligning how building performance is measured. Local alignment with pre-existing statewide policies (where practical) to utilize common metrics and implementation processes can leverage existing best practices and save resources. Another key opportunity is adopting a dual-metric framework that pairs greenhouse gas intensity (GHGi) with an energy efficiency metric such as energy use intensity (EUI). Pairing emissions-based metrics with efficiency metrics helps ensure that policies continue to drive real improvements in building performance, rather than allowing compliance to be achieved through grid decarbonization or the use of renewable energy credits (RECs).

There is also an opportunity to align emissions accounting methodologies across jurisdictions. Differences in how emissions factors are calculated or how RECs and other forms of clean energy procurement are treated can lead to inconsistent outcomes across policies. Publishing the emission accounting approach and justification for the same may support establishing consistent approaches to emissions calculations and can help ensure that buildings are evaluated against comparable performance metrics at both the state and local levels.

Designing a Defensible BPS

A well-designed BPS should be aware of several “lightning rod” issues that have led to delays or rollbacks of BPS and related policies in other jurisdictions around the country. These issues broadly fall into three categories – legal challenges, political alignment, and policy scope.

Issue #1: Legal Challenges

In *California Restaurant Association v. City of Berkeley*, the Ninth Circuit struck down a local ordinance banning natural gas piping in newly constructed buildings, concluding that federal law preempts the ordinance. (U.S. Court of Appeals 2023). Therefore, at least within the Ninth Circuit, energy codes that ban gas and do not offer alternative methods of compliance or flexibilities are not allowed. However, sufficiently flexible codes that do not mandate that EPCA-covered appliances exceed the EPCA standard, are allowed even in the Ninth Circuit, and BPS may fall into this category.

Other plaintiffs have gone further, using the Berkeley decision to push back on any regulation, including Building Performance Standards, that *indirectly* bans the use of gas appliances by setting building GHG (or NOx / PM) targets at zero at some date in the future (Public Health Law Center 2024). These plaintiffs claim that such a regulation violates preemption under EPCA since gas appliances' GHG emissions are regulated at the Federal level, and states cannot set more stringent targets. However, legal experts claim this interpretation is flawed, and in 2025 two key decarbonization policies (Local Law 154 in NYC and New York's All Electric Buildings Act) were upheld in court over these EPCA preemption arguments (Nolette 2025).

Issue #2: Political Alignment

The end products of a BPS are safer, more resilient, and more comfortable indoor spaces that use less energy and produce fewer emissions. It's important to emphasize that this future state has benefits for everyone, not only members of a specific political party. Therefore, those designing a BPS must take care to communicate their intentions and the universal benefits of these programs, using language and methods that do not alienate certain groups.

This is especially important because building performance standards take many years to go from the initial concept phase to implementation, and political winds are virtually guaranteed to shift in these timeframes. Intentionally and proactively making a policy immune to the shifting of political winds can not only mitigate challenges and headaches but also broaden popular support for the program.

A good example of how politics can adversely impact BPS is New York City, where Local Law 97 outlived the administration that initially passed it. It took a lot of time and advocacy for the BPS to pass in 2019, and it did so only because of the political landscape at the time and NYC wanting to take the lead in this space. Advocates successfully engaged already-aligned groups like labor and AIA, who expected to see employment need resulting from the retrofits triggered by LL97. However, because of their positive political momentum, advocates felt little pressure to win over any competing interests – namely, the real estate lobby. In the years since, administrations have changed and popular support for LL97 has waned, so the real estate lobby has more recently become empowered to cause challenges and delays in the implementation phase.

An alternative approach for California would be to secure broad-based support upfront (e.g., labor, design professionals, climate groups, affordable housing coalitions), especially with

groups that do not initially support the idea of a BPS. In parallel, BPS designers can focus on the public at large by producing educational materials that highlight the benefits of the policy in a clear, concise way, free of jargon and digestible for the average reader. Without pro-BPS materials in circulation, organized interest groups (like the real estate lobby in NY) have filled the vacuum with anti-BPS articles aimed at the average voter and subsequently controlled the conversation (Real Estate Board of NY 2022). Lastly, all BPS policies can be mindful of the language they use to describe themselves in public. Policies with discernable ties to climate policy have been under attack at the federal level and focusing only on climate benefits risks alienating members of the public who may carry preconceptions about climate-related policy. Fortunately, building performance standards have benefits that extend far beyond climate, so they can just as easily be presented as jobs, health, resiliency, and security policy to weather political transitions and attract bipartisan support.

Issue #3: Policy Scope

Policymakers must carefully select the scope of their policy to maximize impact while limiting the burden on populations that may have difficulty complying. These tradeoffs are well understood and discussed in the literature, so scope selection tends to be a key focus in the development of most BPS. However, the inclusion or exclusion of certain groups in a BPS may also trigger issues with public perception. These perception issues are not as widely discussed but can be equally impactful in the implementation phase.

Some building types can be particularly challenging to address under BPS policies, including:

- Condominiums and housing associations
- Buildings served by district hot water or steam systems
- Campuses (including those served by district energy systems)
- Manufacturing and industrial facilities

These categories present distinct barriers. Condominium buildings can be difficult to retrofit due to governance structures, split incentives, and capital planning limitations within housing associations. For district-served buildings and campuses, challenges relate to limited control over upstream decarbonization and efficiency improvements. Public schools and campuses may face funding and financing constraints. Manufacturing and industrial buildings can have high process loads and defining performance targets for this sector is particularly challenging. It is important that if the scope of the BPS policy includes any or all such buildings, there are appropriate adjustments, flexible compliance options and alternatives included to support the unique challenges these hard-to-decarbonize buildings represent.

One example of how BPS scope has led to public perception issues is the treatment of condos in several policies around the country. Often, condo buildings can fall within BPS scope because of their overall size (e.g., over 50k ft²) but the individual dwellings are owned and maintained by owners, like single-family houses. Condos pose a unique challenge- the units are individually owned, with a housing board or a condo association typically governing certain rules and requirements for condo owners. There are often common areas served by central systems, but individual units may be served by the central system or separate systems. BPS policies can reduce ambiguity by clearly specifying that, in the case of condominiums, the “building owner” includes housing boards and condominium associations. Policies can also provide alternative

compliance pathways for these buildings that account for the financial and governance constraints under which they operate. Requiring condominiums to comply through the same pathways designed for typical commercial buildings is likely to generate significant stakeholder and political pushback (The Real Deal 2025). Building Performance Colorado states that condos are covered when there are shared centralized heating/cooling systems, and it also designates the housing association as the entity responsible for compliance (CO 2023), reducing ambiguity for multi-owner properties. Additionally, condo buildings requiring significant upgrades to comply with BPS (e.g., whole-building envelope) can split these enormous costs equally among residents. Alternative compliance pathways are often presented as a solution to this problem; for example, Denver's Residential Condominium Building ACO requires implementation of measures in all common spaces and explicitly excludes individual units. It includes concrete requirements, for example 100% LED lighting load, occupancy sensors, and 100% renewables for common spaces (Denver 2025).

Another example includes manufacturing and industrial (M&I) buildings. Most policies exclude buildings where greater than 50% of the use is M&I (CO 2023, WA 2025a). When included, BPS policies integrate additional flexibility for such buildings. For instance, Building Performance Colorado requires a building owner to submit benchmarking data to define individualized performance targets (CO 2023) and Energize Denver includes an ACP which allows a M&I building to comply using a prescriptive or performance pathway (Denver 2026). Policymakers should recognize the unique challenge with defining performance targets for M&I buildings and define the scope of the policy to either exclude predominantly M&I buildings or allow individualized targets and/or ACPs for such buildings.

Most BPS require buildings or campuses served by district steam/HW/CHW to comply with the policy. These buildings are not exempt, but there is often significant flexibility for the first compliance cycle. For example, Seattle allows building owners to deduct emissions from district systems in reporting until 2025 (City of Seattle, 2025). Washington's CBPS has an explicit campus district energy pathway (WA 2023). State campus systems (i.e. steam/hot water/chilled water systems serving five or more buildings) are required to develop a decarbonization plan, which would serve as an alternative compliance pathway for campuses served by such systems, where each building isn't required to meet the building specific target, but the campus is required to comply as a whole.

Opportunities for Streamlining

Policymakers can streamline the scope of BPS by carefully limiting or adjusting requirements for building types that present unique compliance challenges, such as condos, M&I buildings, and campuses or district-energy-served buildings.

- When a policy includes condos, policies can clarify that condo associations are responsible for compliance, create alternative pathways focused on common areas, or exclude condos entirely to avoid political pushback.
- It is challenging to define standard targets for M&I buildings, since these typically use a large amount of energy but a significant portion of it can be process driven. Hence, allowing these buildings to define targets through building specific assessment and benchmarking might be a viable solution for ensuring these building types aren't completely exempt.

- For campuses and buildings served by district energy systems, allowing campus-level compliance plans, emissions accounting adjustments, or district-system decarbonization plans rather than requiring each building to meet standalone targets might be an effective approach for reducing administrative burden, avoiding delays, and improving political feasibility while maintaining policy impact.

Marketing and Framing of Compliance/Noncompliance Fees

New York City

NYC has done an exemplary job in structuring its Alternative Compliance Path for LL97. Typically, noncompliant buildings are hit with fines as a necessary enforcement mechanism; however, this can invite organized resistance from building owners. The city therefore recognized an opportunity for better branding and created the Carbon Offset program. This program allows building owners who either cannot, or simply do not wish to, comply with LL97 to instead pay into a fund that directly assists affordable housing in NYC with LL97 compliance. One example user of this program is a high-profile company with Class A commercial real estate that would rather pay for “carbon offsets” than fines to better align with their corporate ESG goals. Similarly, luxury apartment buildings that have cash reserves but are looking to preserve energy-intensive amenities may elect to keep their buildings as-is but pay for emissions reductions elsewhere in the city.

In short, if it is not cost-effective or otherwise desirable for a building to decarbonize, it can pay for someone else to decarbonize, but only within NYC. Unlike other broader carbon offset programs, this avoids the pitfall of greenwashing because the funding is all traceable within the city.

Conclusion

This paper highlights how policy development and implementation experiences from across the country offer valuable lessons for California as it begins developing a BPS. California is uniquely well positioned for a statewide performance standard due to the existing AB 802 benchmarking framework (State of California, 2015), the availability of interval meter data (California Energy Commission, 2024), unique building identifiers, and an established covered buildings list for properties subject to benchmarking requirements. In addition, the state’s building code infrastructure and enforcement capacity provide the technical foundation necessary to design and administer a policy of this scale.

By learning from states and cities that have successfully developed and implemented BPS policies, California can better anticipate and address common challenges. This paper identifies key opportunities, including aligning state and local policies to reduce duplication, designing adequate staffing and support structures to manage administrative burden, and considering a dual-metric approach that pairs a GHG metric with an energy efficiency metric. Such an approach would help ensure progress toward climate goals through multiple pathways—rather than relying solely on grid decarbonization—and strengthen the policy’s durability in the face of future political and market shifts.

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