

Community Contributor Recommendations

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Introduction

Community engagement throughout 2023 resulted in specific recommendations around the proposed Building Performance Standards (BPS) policy. For full recommendations from our Task Force of industry experts, please see Task Force – Final Recommendations.

Due to the complexity of the topics and intersection of potential repercussions across various cohorts within our local community, key recommendations were developed and/or supported through in-depth conversation with our Task Force, Technical Committee, and other community contributors. To provide context around the recommendations provided, details are included herein regarding the following specific recommendations:

1. **Small Buildings:** This recommendation speaks both to the smallest buildings that are covered by the proposed policy as well as the recommendation for more attainable targets and timelines for the smallest buildings covered.
2. **EUI Caps:** Caps provide a limit to the maximum energy use reduction that would be required for any building.
3. **Renewables:** Supporting the industry Task Force recommendation on increased flexibility, conversations with the community focused on what role renewables should play in a local BPS.
4. **Industrial Buildings:** This provides context on the work done supporting the Task Force recommendation focusing on industrial properties.
5. **State Covered Buildings:** This document provides additional context around considerations on how buildings within Fort Collins, that are also covered by the State of Colorado BPS, can be accounted for in a local BPS.

Small Building Recommendation

This memo summarizes Technical Committee work to date exploring the Task Force recommendation on small buildings.

Small buildings: The BPS Task Force supports establishment of more attainable targets for buildings between 5,000-10,000 square feet, and supports consideration of phased implementation for those buildings, with an interim target of 2030 and a subsequent final target.

Recommendation:

- Buildings between 5,000-10,000 square feet (ft²) shall have a more attainable target via a 15% Energy Use Intensity (EUI) reduction cap (see EUI Caps Recommendation) and shall have an interim target of 2030 and final targets of 2035.

What constitutes small:

- Task Force recommended 5,000-10,000 ft², considering opportunity and number of buildings.
- The Technical Committee confirmed that based on opportunity and number of buildings, 10,000 ft² is a reasonable cutoff.

Excluding buildings below 5,000 ft² from BPS requirements:

- About 900 buildings are below 5,000 ft².
- Opportunity is significantly reduced per building.
- No benchmarking data is available.
- Considerations discussed included savings potential relative to administrative burden, work force limitations.
- Technical Committee supports excluding buildings below 5,000 ft².

Including buildings below 10,000 ft²:

Community contributors discussed excluding buildings under 10,000 ft²:

- Opportunity exists in buildings below 10,000 ft².
- 5,000 ft² 'basement' aligns with Denver.
- Consideration around local building stock; generally more small to mid-sized buildings in Fort Collins.
- Benchmarking data exists.
- Contacts have been identified through benchmarking program.

Considerations for buildings 5,000-10,000 ft²:

- Work force will be strained by addition of small buildings.
- Small buildings are less likely to have facility managers/more likely to have less technical acumen.
- Small buildings are less likely to access financing such as CPACE due to lower project costs.
- Small buildings may have more trouble finding contractors due to reduced project costs.
- Systems unlikely to differ significantly below ~25,000 ft²; not a consideration for this discussion.

Small building requirements:

- Recommend an extended timeline for small buildings.
 - Provides additional time for small buildings to get acquainted with program requirements.
 - Reduces administrative burden by reducing number of covered buildings in 'first wave'.
 - Reduces burden on work force by phasing work.
 - Allows program staff to work through potential barriers and resources that may impact small buildings.

Working toward 2030 goals:

- Interim targets may be set for 2030, allowing small building contribution to 2030 OCF goals.

EUI Caps Recommendation

This memo summarizes Technical Committee work to date exploring the Task Force recommendation on caps. Caps are a way of limiting the required Energy Use Intensity (EUI) percentage reduction and are a pathway that owners could choose as opposed to meeting their EUI targets.

Flexibility: The BPS Task Force recommends including multiple alternate pathways for all buildings to allow maximum flexibility to building owners, potentially including performance or financial caps, electrification, application of emerging technologies, and renewables.

Recommendation:

- 25% reduction cap for buildings 10,000 ft² and larger.
- 15% reduction cap for buildings 5,000-10,000 ft².

Purpose of caps:

- A cap is a 'ceiling' on the EUI reductions expected from BPS. Caps should be the highest amount reduction that is determined to be realistic for buildings in Fort Collins.

State buildings:

- A 29% EUI reduction cap can be applied to buildings covered by the State of Colorado BPS.

Considering the impact of a cap:

- City of Fort Collins staff created a tool that allowed Technical Committee members to see the impact in terms of energy savings and number of buildings covered with various caps.
- Updating these numbers with target EUIs shows that 40% of buildings covered by the proposed local policy are impacted by the cap.
- Cost savings associated with the cap are estimated between \$121-130 million (dollars not spent to meet target).
- Savings loss associated with the cap is estimated at 36,175 metric tons of carbon dioxide-equivalent (MTCO_{2e}); 51,248 megawatt hours (mWh).
- *See BPS Potential Impacts document for more details.

Small buildings:

- Caps offer a straightforward way to provide more attainable targets to small buildings.
- Using caps to assure more attainable targets reduces administrative burden, workforce burden, as well as responsibilities for building owners (as it is an easily understood approach that does not require additional work).
- If City Council does not approve a phased implementation with a delayed start for smaller buildings, consider a 10% EUI reduction cap. If the phased implementation is approved, recommend a 15% reduction cap.
- 10% EUI reduction is very achievable, 15% reduction is very achievable with a phased implementation.

Input around feasibility:

- Technical Committee input that a 25% reduction cap is achievable and is proportionally less aggressive than state requirements, aligning with consideration that local targets be somewhat less aggressive (considering reduced timeline).
- Caps are recommended as a way of assuring feasibility of targets.

Renewables in BPS Recommendation

This memo summarizes Technical Committee work to date exploring the Task Force recommendation on alternate pathways, specifically focusing on renewables, and provides staff recommendations.

Flexibility: The BPS Task Force recommends including multiple alternate pathways for all buildings to allow maximum flexibility to building owners, potentially including performance or financial caps, electrification, application of emerging technologies, and renewables.

Recommendation:

- To incentivize renewables without penalizing owners who do not install them, staff recommend that buildings with onsite solar may be awarded an EUI credit toward their final target.

Feedback:

- **Task Force**
 - The Task Force acknowledged that renewables aren't associated with building performance or efficiency, which is the point of BPS. But it also recognized that including renewables assists the goal of providing maximum flexibility in compliance pathways.
- **Energy Board**
 - On Feb. 8, 2024, Energy Board members expressed that efficiency needs to be the top priority of BPS but did not completely discourage the use of onsite renewables as a pathway to compliance.

Other jurisdictions and best practice:

- **State**
 - For buildings unable to meet a greenhouse gas intensity target or EUI target, renewables may be counted toward BPS targets after all feasible efficiency measures have been met (as assured by an Ashrae level 2 audit).
- **Denver**
 - Renewables may be used to meet efficiency targets by all buildings 25,000 ft² and above and are a prescriptive option for buildings 5,000-25,000 ft².
- **Best practice**
 - "BPS should be designed and implemented such that there is no option for buildings to use renewable energy procurement as an alternative for bold action on energy efficiency, electrification, and demand management." - Institute for Market Transformation.

Existing renewables in Fort Collins:

- Currently 11 Fort Collins Utilities programs focus on renewable energy.

Local opportunity:

- In 2022, our commercial and multi-family buildings with existing onsite solar covered about 20% of their load with solar.

- Based on a 2014 light detecting and ranging study exploring solar potential in Fort Collins, the maximum realistic achievable onsite solar impact (accounting for available roof space) would cover about 35% of our 2022 load.
- Approximately 50 potentially-covered buildings have onsite solar already.

Electrification and efficiency:

Lowering energy use through efficiency projects increases the impact of onsite renewables at the building level and the community level. It brings us closer to our goal of providing 5% of community electricity from local distributed renewable sources by 2030. Expanding electrification will increase electric use significantly, which will lower the impact of onsite renewables. Efficiency is a critical pathway to reducing the increased electric use expected due to electrification.

Onsite versus offsite:

Additional Renewable Energy Certificate (RECs) purchased by individual building owners don't change our community inventory or make any progress toward our goals. Therefore, staff do not support the use of RECs to meet local BPS policy. While there is variable opportunity in onsite renewables from one building to another, the same can be said for all pathways to meet BPS targets.

Additional community considerations:

- Installing onsite renewables may be less disruptive to business practices than other upgrades.
- Onsite renewables may be less cost effective than other opportunities that building owners will explore.
- Onsite renewables may be 'self-limiting' in that the maximum impact may be insufficient to meet targets, meaning that efficiency measures will still be a critical pathway.

Community Collaborator recommendations:

- Efficiency must come first through regulation or other means.
- Onsite renewables are an acceptable pathway to BPS compliance.
- Avoid mandating renewables (e.g., penalizing for failing to install onsite renewables).

Industrial Buildings Recommendation

This memo summarizes staff work to date exploring the Task Force recommendation on industrial buildings.

Industrial Properties: *The BPS Task Force recommends that the City invite further consideration by experts in industrial, manufacturing, and indoor agricultural properties to explore potential opportunities to include them in the Fort Collins BPS.*

Recommendation:

- Continue to explore industrial properties opportunity for future consideration.
- Focus on education and incentives for industrial properties at present.

Industrial properties:

- There are 34 individual buildings in Fort Collins defined as Industrial per Energy Star Portfolio Manager (31 'campuses' accounting for multiple buildings together as part of one complex), currently using 124,000 mWh.
- Industrial properties account for 10% of total city use, 94% of which is in buildings 50,000 ft² and above (covered by the State of Colorado BPS).

Task Force recommendation - State of Colorado BPS:

The Task Force opposes requiring buildings to meet two sets of requirements and recommends that any building covered by the State of Colorado ordinance be waived from complying with the Fort Collins BPS requirements. Therefore, individual buildings 50,000 ft² and larger may be eligible for a waiver from the City of Fort Collins. Industrial buildings are referenced by the state ordinance but not required to meet BPS targets if more than 50% of the gross floor area is industrial.

Feedback from industrial properties:

Local industrial company #1:

- Industrial companies have financial motivation to manage usage and costs (directly associated with profit margin, unlike building owners who do not pay utility costs).
- Regulated load has very little impact; vast majority of industrial use is process load.
- Incentive system is adequately providing support for industrial properties and driving efficiencies where they can be found.
- A mandate would impact competitiveness in the business market, and potentially drive industries out of Fort Collins.
 - Many similar facilities are outside of the U.S.
 - Industrial properties could move outside of the city or state more easily than many commercial/multi-family buildings.
 - Smaller industries without resources may be more tempted to leave Fort Collins.
- Process load is variable due to fluctuations in amount/rate of production; reduced usage may reflect changes to output rather than efficiencies.
- Industrial opportunities are not a 'fixed number'; a target would not work.
 - The trajectory would vary significantly across industries.

- Industrial Company #1 exemplifies a property that has already made significant efficiency improvements/has and continues to fully explore efficiency opportunities and yet is still a huge energy consumer.
- Many fixed systems are not flexible; there is not better technology for some process loads; inflexibility exists in process.
- Retrocommissioning provides 'small beans' opportunities as it does not impact process load.
 - Likewise prescriptive pathways would not impact process load and would have very insignificant impact on their usage.

Industrial company #2:

- Concurred with the points above.
- Noted the challenges of a shared target given the vastly different practices across industries.
- Need to keep process loads within certain ranges due to temperature targets, etc. required to make their product.
- They strive for efficiency but are limited as they can't exceed tolerances required for production at their standard.

Input around feasibility:

- Utilities staff notes that industrial properties are not currently benchmarking per § 12-203 of the City Code. This has implications on our ability to consider achievable targets for these properties and on our ability to isolate the appropriate building contact.
 - City staff recommends any consideration to require compliance with BPS in industrial properties should first begin with no less than three years of required benchmarking.
- Utilities staff worked with other City staff (Economic Health Office and Utilities Business Resource Team) to seek further insights, which aligned with bullets noted above.
 - Utilities staff was discouraged from further outreach to industrial properties.

State Covered Buildings Recommendation

This memo summarizes staff work to date exploring the Task Force recommendation on buildings covered by the state BPS.

State buildings: *The BPS Task Force opposes requiring buildings to meet two sets of requirements and recommends that any building covered by the state ordinance be waived from the Fort Collins BPS.*

Recommendations:

- Staff and community contributors support the Task Force recommendation that no building has to meet different targets for both the City and state.
- Staff and community contributors support the intent of the Task Force recommendation that buildings covered by the state BPS only comply with state targets and requirements.
- Staff recommend that additional consideration be given to enforcing state targets in the 84 local buildings covered by the state, to ensure compliance given the magnitude of savings in those buildings.

Local buildings covered by the state BPS:

- 84 buildings in Fort Collins are covered by the State of Colorado BPS.
- Those buildings account for 18,900 mWh, or 18%, of total projected electric savings, when applying the state targets and caps.

Community greenhouse gas savings and costs:

- See BPS Potential Impacts document for details on energy use and costs for compliance in all buildings within Fort Collins compared to only those not covered by the state BPS.

Other jurisdictions:

- Denver is requiring that buildings comply with both state and local BPS.