

WORK SESSION AGENDA

ITEM SUMMARY

City Council



STAFF

Brian Tholl, Energy Services Director

SUBJECT FOR DISCUSSION

Building Performance Standards

EXECUTIVE SUMMARY

The purpose of this item is to discuss the proposed Building Performance Standards (BPS) policy including updates since the last work session. Staff seek Councilmember feedback on policy before a possible first reading. Staff recommend a regulatory strategy for reducing building energy use and emissions. Input from affected groups shaped the policy recommendations outlined in this work session and associated materials. BPS policy work aligns with the 2024-2026 adopted Council priorities and the Our Climate Future (OCF) plan; specifically, the goal of an 80% greenhouse gas emission reduction by 2030 and Big Move 6: Efficient, Emissions Free Buildings.

GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

1. Do Councilmembers have feedback on the Building Performance Standards (BPS) policy levers identified?
2. Do Councilmembers support advancing a BPS regulatory framework for adoption?

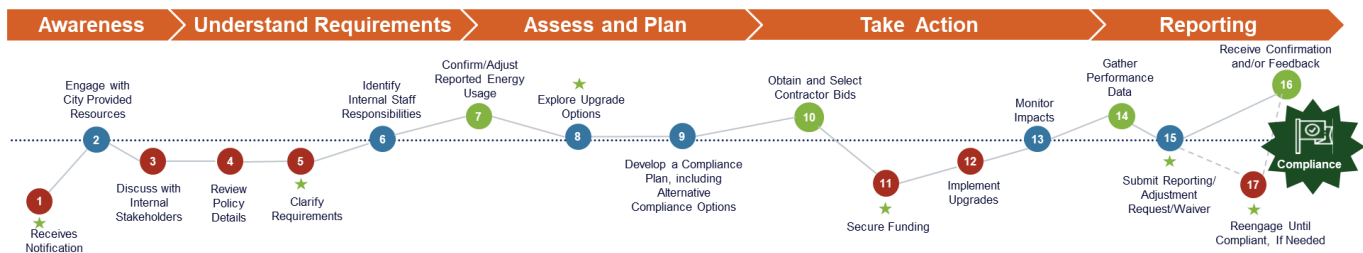
BACKGROUND / DISCUSSION

Buildings in Fort Collins account for more than two-thirds of our local greenhouse gas (GHG) emissions, which are a leading cause of respiratory morbidity and contribute to the severe non-attainment status for county-wide pollutants. Reducing emissions through energy efficiency impacts local health. It is also tied to the local economy. Becoming more energy efficient is the most cost-effective way to lower energy use, which impacts rate pressure for all Utilities customers, not just those in covered buildings. BPS represent an investment in our local building stock and infrastructure. They also have the potential to save local utility customers hundreds of millions of dollars over the next few decades, while improving health, safety, and comfort in local buildings.

Over the course of 2025, staff partnered with local building owners to complete a Customer Journey Map and a Technical Support Pilot.

Customer Journey Map Activity and Findings

In partnership with BlastX Consulting, staff created a customer journey map to facilitate a shared understanding of the BPS journey for a variety of audiences. The map was designed to isolate potential pain points and align them with existing or recommended mitigation strategies. The map incorporates a comprehensive review of existing documentation, internal knowledge, and feedback from building owner representatives. The process also isolated opportunities to capture feedback throughout the journey and assigned likely building owner sentiment to steps in the journey map, as reflected by the color and placement of actions on the map below. Actions that are depicted in green reflect positive customer sentiment, while blue represents neutrality and red represents negative customer sentiment.



BlastX interviewed building owner representatives to validate and identify any new journey steps or pain points they might encounter, ultimately aiming to inform the City's support strategies and resource development. Through analysis of interview data, BlastX uncovered a series of key themes and opportunities, including:

- The importance of clear, accessible language and responsive communication
- Transparent and accessible information on financial resources
- A streamlined and user-friendly web-based tool for compliance and resources
- Resources and information about “off-ramps”
- Clearly stated outcomes and goals of the policy

For a review of the journey map's specific steps along with projected pain points and mitigation strategies, see Attachment 1: BPS Customer Journey Map.

Technical Support Pilot

The technical support pilot provided robust on-site assessments of the following building types:

- Municipal
- Multi-family
- Office (two buildings)
- Mixed-use historic
- Restaurant

Two of the buildings included in the pilot are over 100 years old. All buildings chosen needed to meet the maximum reduction cap for their size, to demonstrate options to meet the policy's maximum requirements. Therefore, buildings were not selected to be representative examples of 'average' commercial buildings

covered by the proposed policy, but rather to provide real world scenarios for compliance in a subset of local buildings.

Overall Pilot Findings

The following high-level findings were observed during the pilot.

Cost of Compliance:

- Average cost of compliance on a per square foot basis was on par with BPS policy estimates (average \$4.64/square foot).
- Cost of upgrades varied across buildings (between \$0.15/square foot to \$13.20/square foot).
 - Some buildings with the highest cost had equipment at or near the end of their useful life, which blurs the line of how much of upgrade costs were due to the BPS policy itself as opposed to operational or maintenance expenses for the building owner.
- Cost estimates were provided by a third-party engineering partner. At this time, pilot timeline or participant purchasing constraints have not allowed local contractor bids to be collected for all projects. Initial feedback from the municipal building indicates vendor cost estimates and energy use intensity (EUI) impact estimates are accurate.

Technical Feasibility:

- Recommended upgrade measures varied across all buildings, including various operational and equipment-based upgrades such as installing programmable thermostats and upgrading refrigerators.
- Maximum reduction caps for individual buildings (which limit the maximum required reduction in inefficient buildings) were determined to be technically achievable in all six building scenarios.
- No buildings require fuel switching to come into compliance, although options for compliance can include system electrification.

Engagement:

- Building owner awareness, helping them understand requirements, and assessment and planning steps will likely take a minimum of 12 months.
 - Technical support and program staff continue to support emphasizing sufficient time for building owners to fully comply with BPS requirements.
- Awareness of specific proposed BPS policy requirements is still low among building owner representatives engaged during the pilot enrollment process.

The following table provides a high-level economic summary of the proposed upgrades for local buildings.

Building Upgrade Summary

Property	Building Size (square feet)	Building EUI: kBTU/ft ²	BPS target* for property kBTU/ft ²	Estimated Cost for compliance before rebates**	Simple payback with local rebates	Cost for compliance per square foot
Municipal Building	5,500	110	36	\$1,560	0.4 yrs	\$0.28
Mixed Use Museum / Restaurant	17,875	269	103	\$236,000	20.6 yrs	\$13.20
Office (1)	31,669	102	56	\$4,500	6.8 yrs	\$0.15
Office (2)	44,142	110	63	\$240,000	19.4 yrs	\$5.43
Multi-family	104,826	68	43	\$490,300	19.1 yrs	\$4.68
Restaurant	7,066	437	185	\$3,100	1.2 yrs	\$0.43

*All pilot buildings, due to existing EUI, would be required to achieve the maximum required reductions by size of 15% or 25% to achieve compliance.

**In some cases, cost to comply includes replacing equipment that is at the end of its useful life.

Each building representative was presented with multiple options to reach their target. The pathways included above are those with the shortest simple payback, but those are not always the options with the lowest upfront cost. For example, office building (2) could reach its target with half the upfront investment, but the simple payback would be longer.

Four of the buildings were capped at a 25% reduction based on their size, while two smaller buildings were capped at a 15% reduction. The cap recommended in policy prevents buildings from being tasked with reaching targets that may be financially or technically untenable based on their current level of efficiency and distance from target; caps are the maximum reductions that any building covered by the proposed policy would be required to achieve. Per policy recommendations, the lowest EUI from the previous three years of benchmarking was used as a baseline, providing owners with the ability to include any recent efficiency improvements. Cost included does not factor in any available rebates, incentives, or tax deductions, however simple payback is calculated including local Efficiency Works Business rebates, when applicable.

Municipal building details:

An energy assessment was performed at 3156 Overland Trail, at the City-owned Spring Canyon Park shop. Primary recommendations from the onsite assessment include LED lighting upgrades, lighting controls, installation of programmable thermostats and scheduling, as well as appliance upgrade recommendations. Not all listed measures are required to meet BPS target.

This municipal building pursued upgrade opportunities with both internal staff and a contractor. BPS target or timeline adjustments are not needed due to cost and ease of installation. BPS targets can be met at a cost of \$1,560, although further upgrades were made, bringing projected energy use reductions to 25% at a cost of \$3,360. Staff will monitor and verify energy savings reductions achieved with these upgrades.

Historic Building details:

An energy assessment was performed at a three-story historic building on College Avenue that consists of several use types, including an office and a restaurant. Possible upgrades identified include LED lighting upgrades, lighting controls, installation of demand-controlled kitchen ventilation, replacement of HVAC

rooftop units and boilers (equipment at or near the end of their useful life), and building window and insulation upgrades. Not all listed measures are required to meet BPS target.

Total costs of equipment upgrades needed to bring the building into compliance was approximately \$236,000, including the replacement of end-of-life HVAC rooftop units and boilers. While the building is not a likely candidate for a target adjustment (given replacing end of life equipment is a likely pathway to compliance), it would be a candidate for a timeline adjustment, allowing the building owner to replace old equipment over several years to reduce single-year expenses. In this case, the boiler replacement may occur after the rooftop units given current equipment condition; a standard timeline adjustment would consider aligning targets with necessary replacement that might happen a few years beyond standard policy targets.

Likely pathways to compliance do not conflict with historic preservation requirements. If a building's only options were pathways that would potentially conflict with historic preservation requirements, those would supersede BPS requirements.

Additional Context

Some building efficiency work will happen even without an adopted BPS, given that buildings are upgraded and improved to a degree without regulation. When existing equipment reaches the end of its useful life, replacing it with the lowest cost option typically represents an improvement in the existing equipment's efficiency. For some buildings, achieving BPS targets represents a small investment on top of an existing cost or replacing equipment at the end of its useful life. That is estimated to account for about \$25 million of the \$185 million in total projected BPS community costs, and an estimated 5-8% of the total GHG reduction is likely to occur in these buildings regardless of policy adoption.

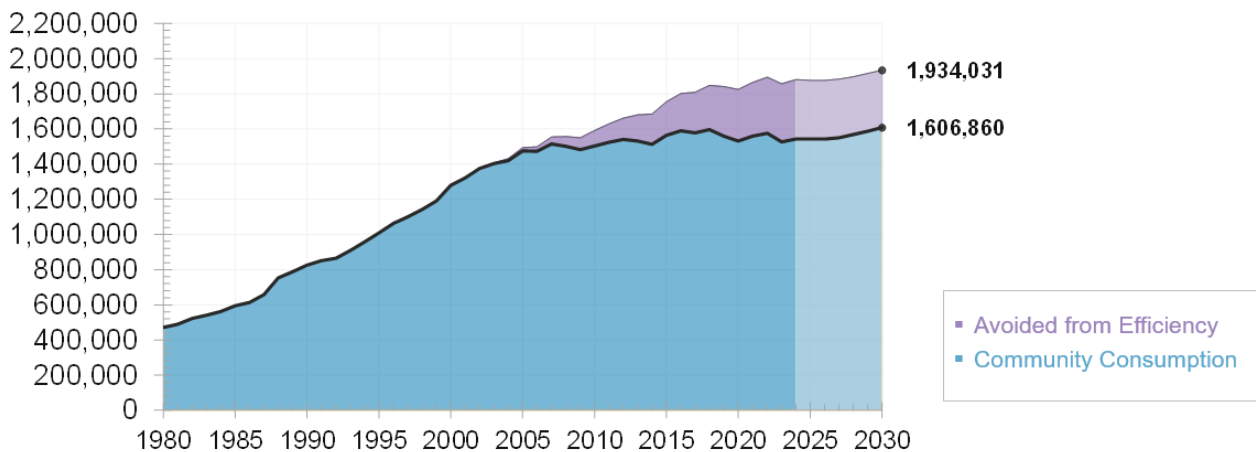
Incentive Versus Regulatory Framework

Utility-sponsored energy efficiency programs in Fort Collins date back to 1982, when Utilities launched education and load management programs. Official action to incorporate efficiency in a clean electricity supply began in 2003, when the City adopted the Electric Energy Supply Policy. Staff, the citizens' electric board (now Energy Board), and members of City Council all sought opportunities to pursue clean energy goals. The policy resulted in a commitment to fund demand side management (DSM) customer rebates, and Utilities' first formal DSM plan budget was approved in 2004. Without incentives, behavioral intervention and other market efforts, we forecast Fort Collins' community electric load would be about 22% higher.

Incentives delivered through efficiency-focused programs will continue to be a key component of delivering reliable, affordable, and environmentally-responsible electricity. Staff recommendation of a regulatory approach in BPS will only be successful with continued funding and resources dedicated to helping commercial customers improve building energy use and reduce waste. Outcomes from building efficiency not only help individuals reduce building operation expenses over time but also benefit the broader community by lowering upward pressure on utility rates.

The following chart shows recent achievements through incentive-based energy efficiency programs, as well as forecasted achievement supported by a market potential study.

Community Electricity Consumption MWh

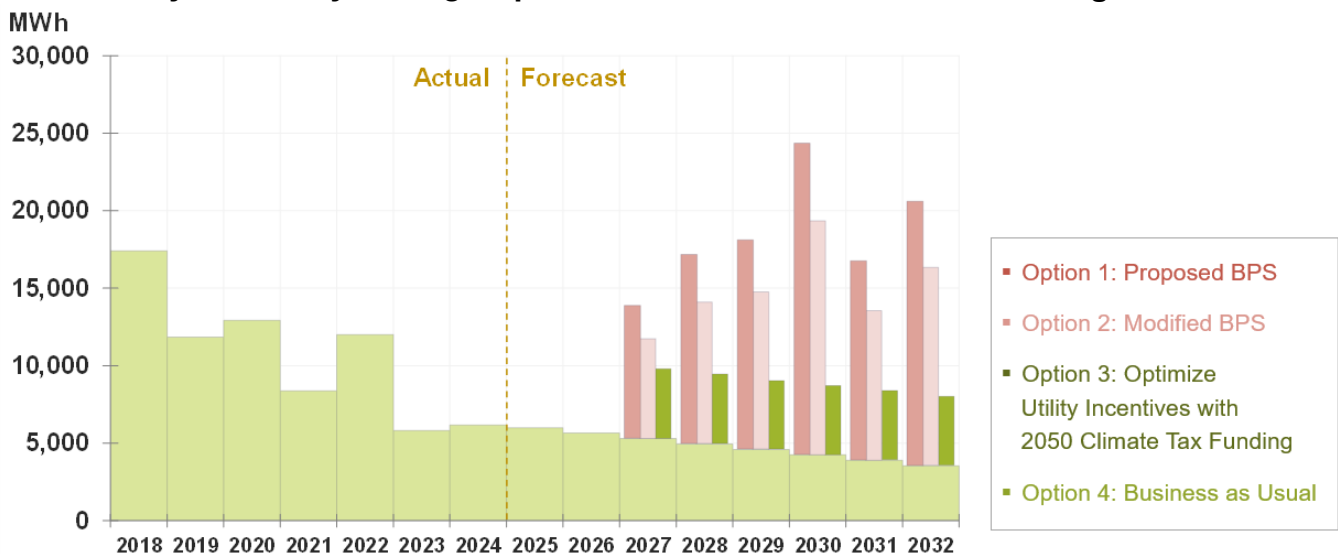


For discussion purposes, staff have provided a comparison to develop several options for Council to consider and provide feedback.

Council Options and Discussion

Staff are seeking Councilmember feedback and preferences on policy levers related to the BPS regulatory framework. The following options have been developed as a starting place for Council discussion, and the graphic below demonstrates electric savings associated with each option on top of the existing 'business as usual' economic (incentive) based approach.

Community Electricity Savings Options over 'Business as Usual' Savings



Option 1: Proposed BPS policy

In alignment with Council priority #6 and OCF outcomes, staff recommend Council pursue the original community Technical Committee and Task Force recommendations, with the exception of pushing back the compliance deadline to 2032. This timeline allows time for a broader community engagement and

compliance period for building owners, and aligns with the original recommendation to have a minimum of six years for building owner reporting and compliance.

Option 2: Modified BPS

Staff have used the policy levers identified to develop a modified BPS approach. This modified approach represents a starting place for Council discussion. The combination of the policy levers selected represents a 25% reduction in emissions impact from the proposed policy (Option 1).

- **Extend timeline for compliance to 2035:** Longer timeline better supports the business community in periods of economic uncertainty.
- **Reduce maximum reduction “cap” by 5%:** This could minimize the potential out-of-pocket costs for individual buildings.
- **Exclude 5,000-10,000 square foot buildings:** This could minimize the policy impacts to local small business by reducing the total number of buildings covered.

Trade-offs associated with levers used to modify the policy are captured in the table below:

Policy Lever	Potential Change	Economic/Mitigation Impact	Trade-off
1. Timeline	Extend compliance 3-5+ years	Minimal – Shifts outcomes	+ Allows additional planning, flexibility during economic uncertainty - Missing interim policy goals
2. Maximum Reduction Cap	Reduce cap by 5%	High – average 20% of costs for individual buildings	+ Reduced individual building investment - Reduced long-term benefits
3. Covered Buildings	Exclude buildings 5,000-10,000sf (310 buildings)	Minimal – 5% reduced policy impacts, costs	+ Reduced operating expense pressure - Does not improve energy use or building conditions for small business
	Exclude multi-family buildings (148 multi-family campuses)	High – 17% reduced policy impacts, costs	+ Reduces upward housing affordability pressure - Owners not required to reduce rate pressure/improve living conditions for tenants
	Exclude New Construction (2024 IECC)	Minimal – inflation / NPV	- Dependence on compliance with 2024 IECC

Option 3: Optimize Utilities Incentives with 2050 Climate Tax

With community and staff support, 2050 tax dollars are an opportunity to enhance existing incentives and are in alignment with the 2050 ballot language. Analysis confirms that directing the maximum amount of 2050 tax funding allowed for sustainability efforts (approximately \$30 million over six years) to additional incentives could produce approximately 26,500 megawatt-hours (MWh) of additional electric savings, compared to 84,600 MWh BPS electric savings (see Community Electricity Savings Options over ‘Business as Usual’ Savings graph above).

Option 4: Business as Usual

Utilities will continue using enterprise funds to provide incentives for the voluntary installation of high-efficiency equipment in commercial businesses. Efficiency programs are less expensive than the cost of purchasing additional electricity and are part of our plan to provide reliable, affordable, environmentally-friendly electricity to the community.

NEXT STEPS

Staff are open to feedback on tradeoffs from Councilmembers and are prepared to proceed with an incentive or regulatory approach.

ATTACHMENTS

1. BPS Customer Journey Map
2. Energy Board Memo, July 15, 2024
3. Air Quality Advisory Board Memo, December 16, 2024 (updated version coming soon)
4. Natural Resources Advisory Board Memo, October 16, 2025
5. Economic Advisory Board, August 21, 2024 (updated version coming soon)
6. Presentation