

### **City of Fort Collins Building Performance Standards (BPS)**

70,000

60,000

50,000

40,000

30,000

20,000

10,000

2025

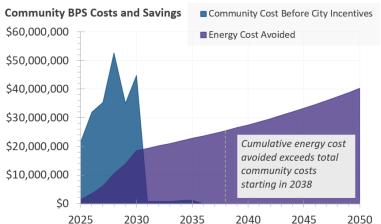
#### Our Climate Future (OCF) and BPS

Our local community helped shape the City Council-adopted OCF plan. The plan defines success through the achievement of key outcomes, referred to as 'Big Moves.' Steps to achieve Big Moves are defined as 'Next Moves' or strategies. A BPS policy is a Next Move that supports Big Move 6: Efficient, Emissions Free Buildings. Recommendations were developed to address community and council priorities. BPS is the most impactful direct policy action the City can take toward advancing Big Move 6.

#### **Policy Impacts**

City staff estimate the number of metric tons of carbon dioxide equivalent (MTCO2e) avoided due to the proposed BPS policy will go up each year, tapering after 2030, as shown to the right. The estimate assumes larger buildings meet their targets by 2030, and subsequent gains in avoided emissions would come from buildings between 5,000-10,000 square feet.

Once final targets are met, BPS policy savings are projected to be 65,000 MTCO2e each year. By 2050, that equates to cumulative savings of 1.5 million MTCO2e. If policy adoption is delayed, each year the community would emit an estimated 10,000 of additional MTCO2e. This would mean falling short of the OCF greenhouse gas emission goal by about half a percent each year.



## 2030

**Administrative and Community Costs** 

Community BPS Emissions Reduction (MTCO2e)

Total program cost for BPS is estimated at \$270 million, including administrative and community costs. Accounting for administrative costs described in the September 2024 City Council Memo, program administration is projected to be \$20/MTCO2e avoided. By 2050, the community would avoid \$630 million in energy costs (represented in the total area after 2038 in the graph). The policy is expected to pay for itself by 2038. Also by 2050, the projected benefit of BPS implementation is \$2.80 in energy savings for every \$1 that the community spends on policy compliance. Not including natural gas savings, community cost is \$105/MWh avoided through increased efficiency, compared

to current community costs for electric rates of \$118/MWh

2035

2040

2045

2050

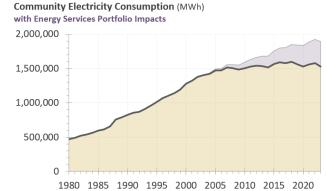
# (projected to increase over time).

#### **Economic Levers**

Since 2002, Fort Collins Utilities has operated incentive-based programs, and community consumption has decreased 24%. Despite steady community growth, incentives have curbed the impact but have not been able to lower overall electric use. Opportunity in incentive-based programs is decreasing in the commercial space; in 2023, there was about half the participation in voluntary programs compared to 2022. The City spent \$2.5 million dollars in commercial incentives in 2023, well below available budgeted incentive dollars.

#### **Policy Development Process**

Staff engaged the community for more than 18 months to shape the proposed BPS policy. An industry Task Force, including representation from commercial real estate and local business groups (DDA, LLAC, North Fort Collins Business Association, and others), helped determine achievable policy parameters and a structure that matches our community needs. A Technical Committee of local building science experts further reviewed achievability of the structure and outlined specific Energy Use Intensity targets unique to building use types. Two



external vendors assisted with technical analysis. Significant additional engagement included environmental, business, and community-based groups, other jurisdictions, federal partners, and more.

#### A Focus on Feasibility

Staff centered engagement on determining what specifics could lead to a truly implementable policy with requirements that buildings can achieve. This included establishing which buildings could and should be covered and how those buildings could comply, with in-depth analysis and discussions of unusual case scenarios. This led to the development of several safety nets tailored to accommodate buildings that may struggle to meet targets, including maximum reduction caps, the inclusion of which reduced policy GHG savings by ½, but were deemed necessary for technical and financial achievability. General targets were designed with the short timeline in mind. Proposed final targets are what other jurisdictions consider 'interim' energy efficiency targets, based on efficiency stemming from improvements to existing equipment rather than equipment upgrades.

#### **Supporting Data**

#### **Benchmarking Data**

Covered building owners provide annual benchmarking data per Article XI, §12-203 of City Code. Building owners report details including their buildings' property use type and use specifics, square footage, energy consumption, and more. Reported data are filtered through 36 flags to determine if they are within normal parameters. Things like abnormal energy use and drastic changes from previous years are flagged, along with specifics associated with various property use types like unusual number of computers in offices or bedrooms in multi-family buildings. Buildings that trip a flag can only come into compliance after speaking to a Help Center staff to explain or correct the abnormal value. About half of the 1,371 covered buildings have tripped flags since the start of the program in 2019. Every single flag has been addressed through a conversation with the building owner or representative. Current program compliance is over 98%. BPS policy proposes covering this same cohort of buildings.

#### **Alternate Data Sources**

Benchmarking data are considered a primary data source because they are entered by building owners or representatives. Other data sources are compared to benchmarking data for validation and to provide robust supporting data for BPS policy development. Reported electric use can be validated against Utilities meter data; reported use is the more accurate metric in most cases given manual changes to appropriate meter aggregations. Property use type and size is recorded by the Larimer County Assessor as well as reported by building owners when benchmarking. Reported data are manually entered by building owners during benchmarking, including adding square footage of each property use type. These metrics are further verified during benchmarking reporting through conversations with our Help Center. About 97% of covered building representatives have communicated directly with our Help Center, allowing for verification of unexpected reported data and error corrections. Adopted BPS policies in other jurisdictions often require third-party verification of benchmarked data, but Utilities staff are hopeful they can perform some of this based on existing data, saving building owners administrative time and cost.

To create energy efficiency targets, Utilities worked with two external vendors to review energy data from thousands of buildings around the country, including but not limited to the following sources:

- Utilities billing and metered data
- Efficiency Works Business program data
- Larimer County Assessor records
- City of Denver benchmarking data

- City of Boulder benchmarking data
- ComStock Analysis Tool (U.S. Department of Energy)
- Commercial Building Energy Consumption Survey (U.S. Energy Information Administration)
- California Energy Data and Reporting System

Over 200 data fields were reviewed per building, and many data outliers were reviewed individually. Staff incorporated local case studies to further ensure feasibility.

#### **Cost Data**

The basis for the local cost information was derived from publicly available cost assumption information, potential studies, and contractor reporter total project costs (through the Efficiency Works Business program). The BPS <u>Cost Benefit</u> <u>Analysis</u> considered costs for improvements and electric savings through 2035, without accounting for any necessary increase in rates to offset increased electric use if building efficiency is not advanced through this and other efficiency-focused policies. Costs provided also did not include any 'business as usual' assumptions, but rather factored 100% of total project costs (e.g., including costs for equipment already at the end of useful life, upgrades that would happen without policy adoption, etc.). Total costs per property before factoring in incentives, rebates, tax deductions, and other financial assistance equal approximately 1% of each buildings' last purchase price, also aligning with the average cost of a tenant finish over the last 10 years (\$200,000/building).