



Energize Denver Ordinance

Energize Denver is an ordinance that was developed to improve health and equity, create jobs, and achieve an 80% reduction in carbon emissions reductions across Denver's building stock by 2040. This ambitious initiative will not only lead to lower energy bills but also have a positive impact on public health outcomes.

HIGHLIGHTS

- > Legislated in November 2022 as a city-wide effort to reduce greenhouse gas emissions (GHG); outlines the City and County of Denver's 2030 energy performance targets.
- > Has targets set for 2024, 2027 and 2030 based on Energy Use Intensity (EUI)—a measure of the amount of annual energy consumption by a building, divided by the total square footage of the building.
- > Carries potential penalties for inaction; could result in significant fines for building owners.

BENEFITS FOR BUILDING OWNERS AND OCCUPANTS

Energize Denver will provide over \$1 billion in benefits to the city through avoided social costs of carbon emissions. As buildings improve their energy use and reduce operations costs, Denver will become a more competitive, attractive city for businesses and residents.

- Improved return on investment for building owners
- Reduced energy and operations costs
- Improved indoor and outdoor air quality
- Improved building supply in Denver
- Higher property values

ENERGIZE DENVER: WHAT YOU NEED TO KNOW

THE ENERGIZE DENVER ORDINANCE IN A NUTSHELL

The ordinance focuses on three aspects:



Annual benchmarking
of energy use



Energy performance
requirements



Electrification requirements
when replacing space and water
heating equipment, when cost
effective.

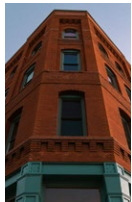
Specifically, it applies to commercial and multifamily buildings in the following ways:



Buildings 25,000 square feet (SF) and larger

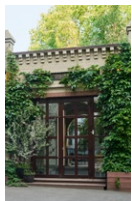
Must submit annual benchmarking data and reduce energy use by no less than 30% by 2030 (with interim targets set for 2024 and 2027) compared to the 2019 ENERGY STAR published baseline Energy Use Intensity (EUI).

**Failure to meet these performance requirements could result in fines as much as \$0.30/kBtu over the limit, as well as annual fines of \$2,000 for not submitting a benchmarking report and \$0.05 per kBtu for failing to maintain the reductions after 2030.*



Buildings 5,000-24,999 SF

Must meet prescriptive lighting or renewable energy requirements.



Buildings under 5,000 SF

Not subject to meeting specific performance requirements but, along with all other existing buildings, must consider partially electrifying buildings when it's time to replace gas-fired heating and cooling systems.

By design, the compliance metric, EUI, is relatively easy to obtain, both for benchmarking as well as the annual compliance submissions. However, identifying actual strategies to meet the reduction requirements can be a much more difficult effort, especially considering that these often require capital investment.



ENERGIZE DENVER: WHAT YOU NEED TO KNOW

FREQUENTLY ASKED QUESTIONS

> What are the benchmarking requirements?

As a key part of the ordinance's requirements, benchmarking reports verify for the city that building owners/operators are meeting interim and final performance requirements using a metric called Energy Use Intensity (EUI), which is a measurement of annual energy consumption per SF. All large buildings must submit this report by June 1 annually. If the EUI is higher than the requirement, actions need to be taken to reduce energy use or there will be fines/penalties. Target adjustments can be obtained for data centers, operating hours, parking you couldn't exclude, and swimming pools. Timeline adjustments may also be requested to customize the timeline to the building's needs.

> What are the energy performance requirements?

Applicable buildings over 25,000 SF shall reduce energy consumption by no less than 30% by 2030, with interim targets set for 2024 and 2027. Failure to submit a benchmarking report, meeting the performance requirements, or maintaining the reductions after 2030 will result in fines as outlined within the Energizing Denver Hub. Renewable credits can be used to bridge the gap between EUI after upgrades and the 2030 EUI target.

For small buildings classified as being between 5,000 and 24,999 SF, prescriptive requirements are in place in lieu of specific energy reduction targets. Small building owners either need to install LED lighting to cover at least 90% of the building's lighting load, install lighting that meets 2019 Denver Building and Fire code requirements for lighting power density, or install or purchase renewable energy to account for at least 20% of the building's annual energy usage.

For buildings under 5,000 SF, performance-based and prescriptive-based measures to reduce energy consumption are not required. However, all existing buildings, including buildings under 5,000 SF, must consider electrification when replacing a building's gas-fired HVAC or domestic water heating equipment, and must do so when it is cost effective.

> How do you benchmark multiple buildings that share a utility meter?

Owners can benchmark all included buildings as a single building, though it may be advantageous to install equipment to submeter usage if one or more of these buildings are particularly poor performers. This may also be the case for retail strip malls typically benchmarked as a single building.

> Does Energize Denver preclude other city and state green building requirements?

No, buildings over 25,000 SF are still required to meet the Denver Green Building Ordinance, and buildings over 50,000 SF must report their benchmarking to the State of Colorado.

> Does Energize Denver apply to new buildings?

No, buildings built to comply with Denver's 2022 building code should be ready to perform at the target performance level making it unnecessary for them to comply within the first 12 months of operations. After this period, the building is considered an existing building and will be subject to Energize Denver requirements.

> How are other buildings performing relative to yours?

Now you can visit www.energizedenver.org to see how certain building types are performing.

> What are the upcoming electrification requirements?

Building owners must consider electrifying space and water heating equipment at the end of the existing equipment's useful life and must do so when cost effective. Electrification Feasibility Reports are used to compare the costs of replacing gas-fired equipment with gas-fired or electric options.



WHERE DO YOU START?

Engaging with qualified engineers to perform an ASHRAE Energy Audit, carbon emissions audit, electrification assessment, and a solar feasibility study will help building owners better understand the options available to a particular property—the potential savings, the implementation cost, and the return on investment—in a way that not only helps to meet their performance goals but also allows them to prioritize and create an optimal implementation plan. Extra support for under-resourced buildings will be offered by the city as well.

NAVIGATING THE ORDINANCE

It's important to understand the nuances of programs like Energize Denver and how to ensure no stone is left unturned. At Marx Okubo, we continually learn through helping many clients with this type of compliance in Denver—and across the US—to help them navigate issues, evaluate energy efficiency, and prioritize spending.

To learn more about measuring performance, identifying high-performance strategies, or navigating the Energize Denver Ordinance process, contact Michael Silverman or Jamie Rivera with QR codes to the right.



Michael
Silverman



Jamie
Rivera



As a trusted national AEC consulting firm, Marx Okubo works with real estate owners, investors and lenders—at every point of the property lifecycle—to **evaluate** their building projects, **solve** complex challenges and **implement** tailored solutions.

Denver • Seattle • San Francisco • Pasadena • Orange County • Dallas • Atlanta • New York

SATELLITE: Portland • San Diego • Phoenix • Austin • Houston • Boston • Washington, D.C. • Nashville • Tampa • Orlando • Miami

