Energize Denver
Performance Requirements
for Buildings 5,000 – 24,999 sq. ft.

August 2023
Agenda

- Background
- Requirements for building owners
- How to demonstrate compliance:
  - Lighting
  - Renewable energy
- Alternate compliance options
- Support programs & Help Desk
- Q&A
Background
Commercial and Multifamily Buildings are 49% of Denver’s GHG Emissions

> 25,000 sq ft:
  - 82% of sq. footage
  - 3,000 buildings

< 25,000 sq ft:
  - 18% of sq. footage
  - 14,000 buildings

Denver has committed to eliminate greenhouse gas emissions by 2040. For buildings and homes, this means our goals are:

- All **new** buildings and homes “net zero energy” by 2030
- All **existing** buildings and homes “net zero energy” by 2040
Energize Denver Ordinance Sections

### Benchmarking
- Implemented by CASR
- Buildings 25K+ sq. ft. submit energy data annually

### Performance
- Implemented by CASR
- Minimum energy efficiency requirements for buildings 25K+ sq. ft., and prescriptive requirements for buildings 5,000 to under 25K sq. ft.
- Improvements to energy efficiency and increase renewables

### Electrification
- Implemented by CPD
- All Commercial and Multifamily Buildings
- Partial Electrification of Space and Water Heat upon System Replacement, when Cost Effective
Benefits for Building Owners and Occupants

As the buildings improve their energy use and lower the cost of operations, Denver will become a more competitive, attractive city for businesses and residents.

Additional benefits:
• Reduced energy bills and cost of operations
• Improved return on investment for building owners
• Reduced maintenance costs
• Higher property values
• Improved indoor and outdoor air quality
Stakeholder Engagement

Outreach sessions (Oct 2022 – June 2023)
• 22 virtual and in-person discussion groups with building owners
• 30 key informant interviews (public sector, market actors, non-profits)
• 4 meetings targeted towards under-resourced building owners
• 2 roundtable discussions with service providers

Impact of stakeholder engagement:
• Refined rules and draft compliance structure
• Created 2 alternate compliance options
• Identified preferred communication methods and most-requested support mechanisms for building owners
Prescriptive Requirements

Commercial, Multifamily, Institutional, & Municipal buildings
5,000 – 24,999 square feet
Prescriptive Requirements

• Perform 1 of these options:
  1. Certify that a minimum of 90% of the lighting load is provided by LED lighting
  2. Source 20% of annual site energy usage from on- or off-site renewables
Prescriptive Requirements

• Requirements apply to buildings with Certificate of Occupancy or Temporary Certificate of Occupancy on or before November 22, 2021
# Compliance Timelines

<table>
<thead>
<tr>
<th>Building Size (sq. ft.)</th>
<th>Compliance Deadline</th>
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<tbody>
<tr>
<td>15,001 - 24,999</td>
<td>December 31, 2025</td>
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<tr>
<td>10,001 - 15,000</td>
<td>December 31, 2026</td>
</tr>
<tr>
<td>5,000 - 10,000</td>
<td>December 31, 2027</td>
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</table>

Timeline adjustments available for specific circumstances.
Compliance Pathway #1: LED Lighting
Lighting – 3 Compliance Pathways

1. Buildings constructed or completely remodeled under the 2019 (or later) Denver Building & Fire Code

2. Buildings that must complete a lighting upgrade

3. Buildings that already switched to LEDs
1. For Recently Permitted Buildings

1. If your building was constructed or completely remodeled under the 2019 Building and Fire Code or later (on or after 8/1/2020), you are already in compliance.

2. Submit the final construction permit approved and recorded by the City and County of Denver’s Office of Community Planning and Development (CPD) via our Online Submission Form.
2. For buildings performing lighting upgrades

1. Find a qualified lighting professional to work with. Refer to the Lighting Service Providers page for more information and to find a lighting vendor trained in the Ordinance requirements.

2. Conduct an initial lighting audit using the Lighting Audit Template.

3. Upgrade necessary interior and exterior lighting. Obtain an electrical permit if necessary.

4. Work with the service provider to completely fill out the Lighting Audit Template and the Letter of Attestation for Lighting Compliance.

5. Submit your Lighting Audit Template, Letter of Attestation of Lighting Compliance, and a copy of the lighting professional’s certification to the City and County of Denver via our online submission form.
Compliance Pathway for buildings performing lighting upgrades – who can verify compliance?

- Certified Lighting Consultant through the American Lighting Association
- Lighting Certification from the National Council on Qualifications for the Lighting Professions
- National Association of Innovative Lighting Distributors (NAILD) Lighting Specialist II (LSII) designation
- Licensed Electrical Contractor registered with the State of Colorado

*Copy of certification must be submitted with compliance documentation*
3. For buildings already in compliance

1. Find a qualified lighting professional to work with. Refer to the Lighting Service Providers page for more information and to find a lighting vendor trained in the Ordinance requirements.

2. Conduct a lighting audit using the Lighting Verification Template. Work with the professional to completely fill out the template and the Letter of Attestation for Lighting Compliance.

3. Submit your Lighting Verification Template, Letter of Attestation of Lighting Compliance, and a copy of the lighting professional’s certification to the City and County of Denver via our online submission form.
Compliance Pathway for buildings not performing lighting upgrades – who can verify compliance?

- Certified Lighting Consultant through the American Lighting Association
- Lighting Certification from the National Council on Qualifications for the Lighting Professions
- National Association of Innovative Lighting Distributors (NAILD) Lighting Specialist II (LSII) designation

*Copy of certification must be submitted with compliance documentation*
Renewable Energy Pathway
Renewable Energy – 3 Compliance Pathways

1. On-site renewable power generation

2. Off-site renewable power generation owned by the building owner

3. Off-site renewable power generation owned by a third-party
ESPM Statement of Energy Performance
On-site Renewable Energy

2. Find a qualified renewable energy installer to work with. Refer to the Service Providers page for more information and to find a renewable energy vendor trained in the Ordinance requirements. Ask about rebates & tax credits!
3. Install on-site renewable energy generation. Obtain the necessary permits and Interconnection Agreement.
4. Work with the installer to completely fill out the necessary compliance documentation.
5. Submit compliance documentation to the City and County of Denver via our online submission form.
On/Off-site renewable energy (owned)

<table>
<thead>
<tr>
<th>ESPM Statement of Energy Performance</th>
<th>Ownership document</th>
<th>Power generation document</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDF of generated document</td>
<td>Provide proof that the solar or wind installation is installed, most likely an invoice and interconnection agreement</td>
<td>Installer invoice or installation contract detailing estimated annual kWh generated Signed <strong>On-Site Renewables Statement of Energy Performance</strong> Self-generated report detailing annual kWh generated</td>
</tr>
</tbody>
</table>
Off-site Renewable Energy


2. Find an off-site renewable energy provider to work with. You may want to check out Xcel Energy’s options, Solar United Neighbors and Energy Sage to find available off-site renewable energy options.

3. Subscribe to an off-site renewable energy provider. The minimum length of subscription contract is 5 years. Month-to-month subscriptions not allowable.

4. Submit compliance documentation to the City and County of Denver via our online submission form.
Off-site renewable energy (third party)

ESPM Statement of Energy Performance

- PDF of generated document

Ownership & power generation document

- Copy of subscription contract detailing annual kWh purchased
- Subscription contract must be minimum of 5 years in length
Alternate Compliance Options (ACOs)
• ACO reviews may take some time and multiple conversations to come to an agreement, so CASR encourages building owners to not wait until the deadline to submit their application.

<table>
<thead>
<tr>
<th>If the building’s compliance deadline is...</th>
<th>The application deadline is...</th>
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<tbody>
<tr>
<td>December 31, 2025</td>
<td>December 31, 2024</td>
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<tr>
<td>December 31, 2026</td>
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Timeline Extension Alternate Compliance Option (ACO)
Timeline Adjustment

Apply for a timeline for a variety of reasons that could make meeting your deadline difficult.

- Planning for major renovation
- Change of building ownership
- Restrictions based on lease agreement(s) with current building tenant(s)
- Landmark Preservation Commission review process delays
- Financial distress
- Buildings with industrial, agricultural or other activities that would require an interruption in production
- Multiple buildings with different compliance deadlines are part of a single Energy Performance Contract through an ESCO
- Delays in obtaining an interconnection agreement from Xcel Energy for on-site renewable energy systems
- Other reasons on a case-by-case basis
15% Energy Use Reduction Alternate Compliance Option (ACO)
15% Energy Use Reduction ACO

Implement energy efficiency improvement(s) that will result in a minimum of a 15% reduction in annual site energy use

Notes:
• Must be capital improvement (operational improvements will not be approved)
• Capital improvements that involve installation of fossil fuel-powered space & water heating equipment will not be approved
• Confirmation of 15% energy use reduction through 12 months of energy benchmarking
Application – 15% Energy Use Reduction ACO

Apply for the 15% Energy Use Reduction ACO via our online submission form.

Application Requirements:
- Online application form
- ASHRAE Level 1 energy audit
- Retrofit plan
- Annual site energy usage (ESPM Statement of Energy Performance)
- Any other supporting documentation
Penalties
Penalties

- CASR’s goal is for buildings to invest in energy efficiency, not pay fines
- CASR is committed to supporting building owners with their efforts and exploring the flexibility that alternate compliance options can afford.
- CASR is committed to assisting under-resourced buildings with designing and implementing compliance plans so that penalties are not imposed.
No Compliance Action Taken

Property owner fined at $1.60 per square foot of building’s gross floor area.

\[(\text{GFA}) \times (\text{Cost/square foot}) = \$ \text{ penalty amount}\]

<table>
<thead>
<tr>
<th>Gross Floor Area of Building (sq. ft.)</th>
<th>Penalty Amount per sq. ft.</th>
<th>Total Penalty Amount</th>
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<tbody>
<tr>
<td>5,000</td>
<td>$1.60</td>
<td>$8,000.00</td>
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<tr>
<td>10,000</td>
<td>$1.60</td>
<td>$16,000.00</td>
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<tr>
<td>15,000</td>
<td>$1.60</td>
<td>$24,000.00</td>
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<tr>
<td>20,000</td>
<td>$1.60</td>
<td>$32,000.00</td>
</tr>
<tr>
<td>24,999</td>
<td>$1.60</td>
<td>$39,998.40</td>
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Support and Incentives
Energize Denver Hub

- Resources and technical assistance available through the [Energize Denver Hub](https://denvergov.org/energizedenver)
- Materials: How-to guides, check lists, etc.
- [denvergov.org/energizedenver](https://denvergov.org/energizedenver)
Compliance Guide

• Not sure where to start? Step-by-step for the entire compliance process
• Links to all forms & resources

Compliance Guide

Understanding the performance requirements for your building can be challenging. We have built this simple step-by-step guide to help walk you through the process so that you can navigate the city's requirements for your building with confidence.

1. Claim Your Building

The first step in being able to comply with the requirements is to confirm your building's address and contact information.

Claim Your Building Form

2. Find Your Building ID

The Office of Climate Action, Sustainability and Resiliency sent letters to all building owners and HOAs in late 2022. This letter included a unique building ID for all buildings we believe are subject to these requirements. You'll need this ID number when you submit your compliance documentation to the city. If you lost or never received your unique building ID(s), you can use the building lookup tool. Just enter your building's address and the tool will show you your Building ID number.
Technical Guidance Document

• A more detailed technical document
• Relevant sections are referenced in the Compliance Guide, and as such serves as a required companion document
• Detailed description of penalty structure
• Technical Guidance Document Link
Service Provider Directory

• Provides a list of individuals that have completed the city's performance requirements trainings

• The service providers’ qualifications have not been vetted by the city and we do not endorse their services.

<table>
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<tr>
<th>Lighting</th>
<th>Renewable Energy</th>
<th>Alternate Compliance</th>
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<tr>
<td>1 video</td>
<td>1 video</td>
<td>1 video</td>
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<tr>
<td>Quiz</td>
<td>Quiz</td>
<td>1 quiz</td>
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</table>
What is available for my building?

Check out our Resource Guide for building owners!

Don’t spend hours navigating web sites to figure out what rebates, free programs and financing options may exist for your specific building type!
COST SAVINGS

Business Energy Assessments

We'll determine the best energy assessment solution for your business size and provide low-cost services customized to your energy needs.

Who

If you are an Xcel Energy business customer and would like to get started finding the right sized assessment, complete our Energy Assessment Match Questionnaire. This is a perfect first step to uncover ways of minimizing energy waste and improving energy efficiency.
Financing thru CCEF

**Energy PAL**

- **Loan Amount:** Up to $500K
- **Term:** 2-10 Yrs.
- **Rate:** Below market rates, dependent on term
- **Repayment:** Monthly principal and interest payments

**Who is Eligible for an Energy Project Accelerator Loan (Energy PAL)?**

CCEF’s Energy Project Accelerator Loan, or Energy PAL supports clean energy and energy efficiency improvement projects that result in reduced utility costs, reduced greenhouse gas emissions, increased electrification or electrification readiness, and/or increased renewable energy generation. The Energy PAL is a good fit for small commercial borrowers, municipalities, and nonprofits seeking equipment financing.
Financing thru C-PACE

How Colorado C-PACE works for you
Click Here

→ Read how C-PACE can help create energy-efficient restored historic buildings!
Renewable Energy Support

SOLAR UNITED NEIGHBORS

energysage

www.energysage.com

https://www.solarunitedneighbors.org/

Rooftop Solar
Install solar on your property

- Purchase or finance a solar panel system and save thousands over the 25+ year life of the equipment.
- Add batteries for backup power.

- Maximize financial savings from solar
- Reduce or eliminate electricity bills
- Enjoy tax credits and other incentives

Get free custom quotes from pre-screened installers

Enter 5-digit zip code
Get Started

Community Solar
Subscribe to a local Community Solar Farm

- Purchase energy from a local solar project at a discount. You don't need to own property or install equipment to save with community solar.
- Save 5-15% on your annual electricity bills
- Sign up for free, cancel at no cost
- Support local renewable energy jobs & development

Explore local community solar options

Enter 5-digit zip code
Search Projects
Renewable Energy – Community Gardens

c0.my.xcelenergy.com/s/renewable/solar-rewards-community
Next Steps
Immediate Next Steps for Building Owners

- **Claim Your Building**
- Did you get your compliance letter(s) with your unique Building ID(s)? Use the [Building Lookup Tool](#) if you didn’t.
- Check out the [Energize Denver Hub](#) for resources and webinars
- Sign up for a free energy audit
- Check out available support programs, financing, rebates
- Start to make a plan
Questions?

Help Desk:
http://denvergov.org/energizedenver
energizesmallbuildings@denvergov.org
or 844-536-4528