Energize Denver Ordinance Compliance Guide

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Message from our Director, Moshe Kornfeld

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CJCA's
Greening Jewish
Institutions initiative
is here to provide
you with the
support you need
to complete this
work.

When my second son was born, I made a commitment to climate action. I founded Colorado Jewish Climate Action to fulfill that commitment and I devote each and every day to the project of inspiring Jews and Jewish institutions to pursue climate solutions.

The Energize Denver Ordinance is designed to help the City of Denver achieve critical carbon reduction goals by requiring buildings to make significant energy efficiency upgrades. And yet, for most Jewish professionals, adopting climate solutions is not in the job description. We know that greening your buildings is a daunting task. CJCA's Greening Jewish Institutions initiative is here to provide you with the support you need to complete this work.



Moving beyond the material upgrades and investments you are required to make, we hope that you elevate sustainability within your communities. Commenting on the biblical prohibition of baal tashchit, do not destroy, the Sefer Hachinuch notes that one should be careful not to waste even a mustard seed. We should take this idea seriously. CJCA believes that Jewish organizations can serve as exemplars for the Jewish community and beyond as we pursue a healthy, just, and livable future.

Introduction

The Energize Denver Ordinance (EDO), which was passed in 2016, is an aggressive and necessary mandate meant to help Denver achieve its goal of making all existing buildings net zero by 2040. This city-wide ordinance requires "all commercial and multifamily buildings to reduce greenhouse gas emissions through energy efficiency, renewable energy, and building electrification." Although this mandate applies to all buildings in Denver, it is primarily focused on making larger buildings more efficient.

The ordinance seeks to reduce emissions by 30% across all buildings with over 25,000 square feet of floor space in the City of Denver by 2030. The program requires buildings to track and monitor their energy usage and in order to share that data publicly to increase the market awareness of energy use. Compliance is mandatory and failure to do so will result in fines higher than the cost of compliance.

Key Information

The city goal of reducing emissions by 30% does not necessarily mean all buildings will be required to reduce emissions by 30% individually.

- Buildings must use less energy than 85% of other similar buildings nationally.
- Depending on where your energy usage falls compared to the national average, you may have to do more or less work to reduce your energy consumption.

There are 3 dates to remember:

- Interim target 1: June 1, 2024 (2025 for buildings that keep up with benchmarking. We will use 2025 throughout the document)
- Interim target 2: June 1, 2027
- Final target: June 1, 2030

The 2025 and 2027 energy goals are created by drawing a straight line between your 2019 benchmark energy use and your 2030 energy use goal.

For example:

2019 EUI*: 100

2030 Target EUI: 48

2025 Interim Goal: 76

2027 Interim 62

*EUI is the amount of energy (in kBTU) used per square foot annually (total energy use divided by total square footage).

*You have to maintain your interim goal (within 5%) in the following years or risk being fined. This is true for 2030 and beyond.

How do I get benchmarked?

Benchmarking is the process of measuring and comparing the energy performance of buildings to assess their efficiency levels. It's required annually by the Energize Denver Ordinance.

DUE: June 1, every year.

FINE: \$2,000 (if you don't submit a report annually).

To comply with city mandated benchmarking you must use **ENERGY STAR** Portfolio Manager (ESPM) To do this, you must:

Create a profile for your building(s).

Click <u>here</u> to set up your account. Click <u>here</u> for step-by-step instructions.

Connect your account with your Xcel

Energy usage.

Click <u>here</u> for step by step instructions on how to do this.

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Submit your energy use summary annually (by June 1).

Energy Use Intensity (EUI)

EUI is the amount of energy (in kBTU) used per square foot annually (total energy use divided by total square footage).

There are predefined target EUIs for most building types. However, some unique building types don't have predefined target EUIs, they have a general 30% energy reduction goal.

Building Type	Target EUI	Examples
Specific Buidling Type	Predefined target EUIs based on building type.	 Office buildings: 48.3 kJ/sq ft Hotels: 61.1 kJ/sq ft
Unique Building Type	General 30% reduction goal based on 2019 energy use.	 Convention centers Fitness center/health club/gym with a pool Ice/curling rinks Parking Utility

BUT these EUI goals are based on single use facilities.

If your building is multipurpose (e.g., A synagogue with a fitness center and a day care) you must apply for a target adjustment to get an attainable EUI goal.

An adjusted EUI goal is created using a weighted percent of the 3 largest buildinguse types.

How do I complete an Electrification Feasibility Report (EFR)?

An EFR is an optional way to assess the practicality and cost impacts of switching from gas to electric equipment.

Price per EFR vary by contractor but you can get up to 100% of the costs covered per EFR from the City of Denver (up to \$2500).

- Electrification Pilot Program (EPP)*
- Electrification Feasibility Report Rebate

The City of Denver trained several Denver-based contractors on how to complete an EFR. Click <u>here</u> for a list of contractors who have passed their training.

For further information about the EPP and EFR Rebate please reference our Rebates and Incentives section.

*The EPP is almost full.

Energy Audits

An energy audit assesses the building's energy systems, identifies potential energy-saving opportunities, and recommends energy efficiency measures.

1 You can do an energy audit on your own (a Treasure Hunt).

- To access a workbook which serves as a resource and planning guide click <u>here</u>.
- To understand the basic how-tos of a Treasure Hunt click here.
- To access a Treasure Hunt Map which guides your audit click
- here.
- To download a premade data collection sheet click <u>here</u>.

2 Xcel Audits

<u>Xcel</u> offers subsidized audits for businesses of all sizes. They offer:

- · Free small business audits
- Commercial non-industrial audits
- · Building assessments
- · In-depth system audits

To schedule an audit with Xcel:

- Fill out an <u>energy assessment</u> <u>match questionnaire</u>.
- Xcel will conduct an audit and create an action plan.

3 Alternative Company Audits

If you are not an Xcel customer or would like to use a different auditing company you can look for Denver specific companies.

We suggest Lerch Bates and Group 14 Engineering.

Special Considerations

Here are things to keep in mind when creating a timeline and list of goals:

Solar energy is fully credited.

- In other words you can use as much energy as you want if it comes from renewable sources.
- You can earn solar credits if you install solar panels, join a solar grid, or own panels off site.

You can be exempt from interim targets if:

- 70% of your heating and water heating is electrified.
- 90% of your lighting is LED.

You must replace:

 Hard to electrify systems (e.g., packaged terminal air conditioners, boilers, central hot water) by 2027.

Get a 10% EUI target bonus if:

- 80% of your energy comes from electricity.
- You plan to reach 80% electrification before 2030 and have an action plan for how you will do so.

Economic hardship exemptions.

 They account for physical and/or financial barriers, as determined by an EFR.

You must replace:

 Easy to electrify natural gas heaters with heat pumps (e.g., furnaces, roof top units, individual water heaters) by 2025.

Fines

Target fines are calculated by multiplying the amount of energy above your target that you used by \$0.30.

Penalty Type	Penalty Level	Assessment Period
Benchmarking, failure to correct errors, knowingly withholding or inaccurate information	\$2,000	annually
Target Penalty	\$0.30/kBtu	2024, 2027, 2030
Maintenance Penalty	\$0.05/kBtu	Starting 2031 then annually
Failure to reach target as agreed in Alternate Compliance Agreement	According to date of submission in Table 5	As outlined in agreement

Let's look at a hypothetical example: Imaginary Building (100,000 sq ft).

2019 baseline EUI: 100 kBtu/sq ft.

- Target EUI: 40 kBtu.sq ft.
- Interim target EUIs (80 kBtu/sq ft and 60 kBtu/sq ft)
- Current EUI: 95 kBtu/sq ft.
- Miscategorized only as a daycare.

If they did nothing between now and next year, they would be fined \$450,000 in 2025.

Actual use: 100,000 sq ft * 95 kBtu/sq ft = 9,500,000 kBtu Target use: 100,000 sq ft * 80 kBtu/sq ft = 8,000,000 kBtu

Energy not achieved: 9,500,000 kBtu - 8,000,000 kBtu = 1,500,000 kBtu

Failure to meet interim target fine: 1,500,000 kBtu * \$0.30/kBtu = \$450,000

And that's just in 2025, they'd have to pay maintenance fees for the following years, another fee in 2027, 2030, and every year following. This is why it is so important to be properly categorized!

Incentives and Rebates

Electrification can be expensive and the upfront price tag can be daunting and often a deterrence despite the long term benefits and savings. That's why rebates and incentives are essential during your energy efficiency journey.

The following section contains a list of rebate and incentive programs you may be able to take advantage of during your work to comply with the Energize Denver Ordinance (EDO).

This is not an exhaustive list but it is a great place to start. If these do not apply to you or you are looking for more opportunities, search this national <u>database</u> for more incentive and rebate programs.

For each rebate and incentive program we have provided answers to the following questions:

- 1. What is it?
- 2. Who qualifies?
- 3. How much do I save?
- 4. How do I apply?
- 5. What's the timeline?
- 6. Can I combine this with other rebates?

We've idefntified rebates for:

- Heating, Ventilation, and Air Conditioning (HVAC)
- Solar
- Lighting
- EV Charging
- General Electrification

HVAC

City of Denver - Equipment Rebates

<u>What is it?</u> This city level rebate helps offset the higher initial costs of electrifying your air conditioning system, furnaces, and hot water heaters. This rebate applies to installing split air source heat pumps, mini-split heat pumps, heat pump hot water heaters, and heat pump rooftop units.

<u>Who qualifies?</u> You have to be a commercial or multifamily building located in the City or County of Denver with an existing gas-fired space heating, gas-fired water heating, or electric air conditioning equipment.

How much do I save? The rebate covers up to \$60,000 for standard buildings and \$120,000 for equity priority buildings per calendar year for HVAC electrification projects. Equity priority buildings "serve frontline communities with less access to resources and who may face more barriers adapting to a changing climate." These include deed-restricted multifamily affordable housing, naturally occurring affordable housing, and human service providers, defined as a non-profit tax-exempt entity that offers critical services.

<u>How do I apply?</u> You have to submit an <u>application</u> to get rebate pre-approval before beginning your electrification project.

What's the timeline? Applications are rolling and if approved, you have 180 days to install the equipment.

<u>Can I combine this with other rebates?</u> Yes, but you may not receive a rebate from Denver's <u>Climate Action Rebate Program</u> or <u>Healthy Homes Program</u> for the same equipment.

HVAC

Xcel - <u>Heating, Ventilation, Air</u> <u>Conditioning, and Refrigeration (HVAC-R)</u> <u>Rebates</u>

<u>What is it?</u> Xcel offers HVAC-R rebates to help lower the upfront costs of installing more energy efficient HVAC-R equipment.

<u>Who qualifies?</u> You must be an existing Xcel gas/electric customer and you must purchase and install <u>qualifying equipment</u>.

How much do I save? You can get up to 75% of the cost of purchasing and installation back.

<u>How do I apply?</u> Once you've purchased and installed your new systems you have to complete a short (14 minute) rebate <u>application</u>. You will receive your rebate in six to eight weeks.

What's the timeline? This rebate is available at all times but if you purchase qualifying equipment before August 31, 2023, and submit your rebate application before December 1, 2023, you can get a 50 % bonus rebate.

Solar

City of Denver - Renewables & Resilience Incentive Program for Human Service Providers

What is it? This city level incentive program helps fund the installation of solar panels and electric vehicle (EV) charging stations for human service providers.

How much do I save? This program can cover up to 100% of the costs of installation.

<u>Who qualifies?</u> You must be an Xcel Energy customer who is a human service provider, "a non-profit entity that offers critical services," located in the City or County of Denver. You also must have a demonstrable connection to and input from the local community.

How do I apply? There are two parts to the application: The first confirms your eligibility and the second outlines the project and its costs. The first part of the application requires proof of building ownership, proof of non-profit status, a recent Xcel Energy bill for the building, and at least two letters of support from partner community-based organizations or members served by you. The second part requires a project quote (equipment and labor costs and an estimate from Xcel Energy and/or a qualified contractor), supporting documentation related to the solar photovoltaic system, the Diversity and Inclusiveness in City Solicitations Request Form, your W-9, and the Current Certificate of Good Standing from the Colorado Secretary of State.

<u>What's the timeline?</u> This rebate is open until December 31, 2024. You can submit part one of the application at any time. Part two of the application is reviewed quarterly and the application deadlines are March 7, June 7, September 7, and December 7.

Can I combine this with other rebates? Yes! And they encourage it!

Solar

Federal - Investment Tax Credit (ITC)

What is it? ITC is a tax credit calculated by taking a percentage of the cost of installing solar in a tax year.

How much do I save? You can get 30% back in a tax credit. If you aren't a tax paying institution you can still benefit by receiving a direct payment* from the federal Internal Revenue Service.

Who qualifies? To qualify you must be located in the United States or U.S. territories, use new and limited previously used equipment, and not be leased to a tax-exempt entity (e.g., a school), though tax exempt entities are eligible to receive the ITC themselves in the form of a direct payment. Your project also needs to be under 1 megawatt (MW) and must satisfy the Treasury Department's <u>labor</u> requirements to receive full benefits.

<u>How do I apply?</u> To claim the ITC, a taxpayer must complete and attach IRS Form 3468 to their tax return. Instructions for completing the form are available at http://www.irs.gov/pub/irs-pdf/i3468.pdf ("Instructions for Form 3468," IRS).

What's the timeline? You can complete your solar project at any time and claim it on that year's tax return. However, your project must be completed prior to 2032 to receive the most benefits.

<u>Can I combine this with other rebates?</u> Yes, but you cannot combine it with the production tax credit.

Solar

Federal - Production Tax Credit (PTC)

What is it? The PTC is a tax credit that non-tax paying entities can take advantage of to purchase solar energy systems. It is a per kilowatt-hour (kWh) tax credit for electricity generated by solar and other qualifying technologies for the first 10 years of a system's operation.

How much do I save? You can get 2.75 ¢ /kwh for the first 10 years of the systems life. If you aren't a tax paying institution you can still benefit by receiving a direct payment* from the IRS.

Who qualifies? To qualify you must be located in the United States or U.S. territories, use new and limited previously used equipment, and your building may not be leased to a tax-exempt entity (e.g., a school), though tax exempt entities are eligible to receive the PTC themselves in the form of a direct payment. Your project also needs to be under 1MW and must satisfy the Treasury Department's <u>labor requirements</u> to receive full benefits.

<u>How do I apply?</u> To claim the PTC, a taxpayer must complete and attach IRS Form 8962 to their tax return. Instructions for completing the form are available at http://www.irs.gov/pub/irs-pdf/i8962.pdf ("Instructions for Form 8962," IRS).

What's the timeline? You can complete your solar project at any time and claim it on that year's tax return. However, your project must be completed prior to 2032 to receive the most benefits.

<u>Can I combine this with other rebates?</u> Yes, but you can't combine it with the investment tax credit.

^{*}Direct payment, also known as <u>elective payment</u>, is a way for tax-exempt entities to take advantage of clean energy tax credits. To take advantage of this you have to notify the IRS that you intend to file for the ITC or PTC by pre-filing paperwork. You will be given a registration number that will allow you to file a tax return and get paid by the IRS. Keep in mind that your project will need to be completed before you can file for elective payment.

Lighting

Xcel - Lighting Efficiency Retrofit Rebates

<u>What is it?</u> This rebate program helps cover the costs of upgrading your standard lighting fixtures to more energy efficient LED bulbs (this includes indoor and outdoor lighting).

How much do I save? It depends on what <u>equipment</u> you purchase but you can get up to 75% of the cost of labor and equipment back.

Who qualifies? This rebate is for Xcel customers who buy qualifying equipment.

<u>How do I apply?</u> Once you've purchased qualifying equipment, you have to fill out this <u>application</u> to get your rebate.

What's the timeline? This rebate is always offered but you can get a 50% bonus rebate if you purchase LEDs before September 30, 2023, and submit your rebate application before November 30, 2023.

Lighting

Xcel - Business LED Instant Rebate

<u>What is it?</u> This rebate allows you to buy qualifying LED bulbs at a discount. These savings are instantaneous and come directly from the distributor.

<u>How much do I save?</u> It depends on what equipment you purchase but you can get up to <u>75% of the cost</u> of labor and equipment back.

<u>Who qualifies?</u> This rebate is for Xcel customers who buy qualifying equipment from <u>participating distributors</u>.

<u>How do I apply?</u> Good news: There is no application! Savings are instant and automatically deducted from the upfront cost. You simply provide the installation address for the LEDs and the supplier will apply the discount.

<u>What's the timeline?</u> This rebate is always offered but you can get a 50% bonus rebate if you purchase LEDs before September 30, 2023, and submit your rebate application before November 30, 2023.

Lighting

Xcel- Advanced Lighting Controls Rebate

What is it? This rebate helps offset the costs of installing new, efficient, and more advanced lighting that is automatically controlled so lights are used only when and where needed.

How much do I save? That depends on the scope of your lighting project as rebates are based on \$per kWH saved.

<u>Who qualifies?</u> This rebate is for Xcel customers looking to install a new networked system controlling only LED lighting technology. You cannot have purchased qualifying equipment prior to applying for this rebate.

<u>How do I apply?</u> You have to submit this <u>pre-approval form</u> before beginning your project.

What's the timeline? You can apply anytime.

EV Charging

Charge Ahead Denver - <u>EV Charging</u> <u>Station Grant</u>

What is it? "Charge Ahead Colorado provides grant funding for community-based Level 2 (L2) and DC fast-charging (DCFC) electric vehicle (EV) charging stations. The objectives of Charge Ahead Colorado are to improve air quality, reduce transportation emissions, and increase adoption of electric vehicles across Colorado."

How much do I save? That depends on what types of chargers you purchase. The grant covers up to 90% of the cost of installing qualified EV equipment. The minimum award is 10% of the cost. This means you get more money back the more expensive the charger.

<u>Who qualifies?</u> Eligible applicants include public, private and non-profit organizations, local governments, school districts, state / federal agencies, apartment / condominium complexes, and businesses.

<u>How do I apply?</u> To apply you have to make an <u>account</u> and then submit an <u>application</u>. There are two types of applications you can complete: the short or the standard application. Short applications are only available for applicants requesting three or fewer Level 2 charging stations if they are either a DI Qualifying Entity (Definition in <u>Section IV</u>), workplace, or multifamily housing community. Everyone else must submit the standard application. Click <u>here</u> for a more detailed application guide (including eligibility, application process, and qualifying equipment).

What's the timeline? The short application is open throughout the year and reviewed on a rolling basis. The standard application must be submitted during one of the three application periods in January, May, or October. You must apply and receive funding before you can begin your project.

Electrification

Energy Outreach Colorado - <u>Nonprofit</u> <u>Energy Efficiency Program</u> (NEEP)

What is it? NEEP "helps nonprofits that serve income-qualified Coloradans across the state in upgrading their facilities to increase energy efficiency and lower operating costs. EOC staff help conduct an energy assessment and supply grant funding to offset the purchase and installation of new equipment, including efficient lighting, insulation, low-flow fixtures, and HVAC systems."

How much do I save? It is unclear but it seems the program will help at minimum cover the difference in cost between efficient electric systems and standard ones.

<u>Who qualifies?</u> This program is open to nonprofits that "serve income-qualified Coloradans, including religious institutions that provide direct services regularly, own their building or are in a long-term lease, pay their energy costs, and are classified as 501(c)3 and are in good standing with the state of Colorado."

How do I apply? You must submit NEEP Application 2023.

What's the timeline? You can submit an application anytime but applications submitted after May 31, 2023, will be reviewed in January 2024.

Electrification City of Denver - Electrification Pilot Program

What is it? The Building Electrification Pilot Program will help you understand the costs, benefits, and barriers to installing electric heat pump technology in your building. They'll walk you through the process from start to finish and cover any cost difference between the gas and electric system types. They are still accepting a limited number of applications for the pilot program.

How much do I save? The program promises to help you through the entire process and at the very least cover the cost difference of installing a new electric system. EPP may cover 100% of the costs of electrifying your system; however, the rebate is capped at \$120,000 for Equity Priority Buildings and \$75,000 for standard buildings.

Who qualifies? Any commercial building within the Denver-metro area.

How do I apply? You must fill out this EPP interest form to begin your application.

What's the timeline? You can apply any time but there are limited spots left, so the sooner the better.

Electrification

City of Denver - <u>Electrification Feasibility</u> <u>Report Rebate</u>

<u>What is it?</u> The EFR Rebate covers the cost of the EFR and provides facilitation services to help you navigate electrification and identify further rebates and incentives to help cover the cost of electrification.

<u>Who qualifies?</u> You have to be located within the City and County of Denver, not be owned by the City and County of Denver, must be responsible for your own space heating, cooling, or water heating equipment, be a commercial or multifamily building regulated by the <u>Denver Commercial Building Code</u>, be regulated by Denver's Building Code, and have either a gas-fired HVAC (space heating or cooling), gas-fired water heating, or electric cooling-only equipment.

How much do I save? This rebate pays up to \$2,500 per EFR to cover the cost of hiring a contractor to conduct an EFR. However, you must have your rebate preapproved before conducting an EFR.

<u>How do I apply?</u> You must fill out this <u>application</u>. After you submit it, the city will take up to 10 days to review your application.

What's the timeline? You can submit an application anytime but once approved you have 120 days to complete the EFR. You can submit up to three applications (as an EFR looks at a specific piece of equipment).

Glossary

BTU British Thermal Units

CJCA Colorado Jewish Climate Action

DC Direct Current

DCFC Fast-Charging EV Station

DI Disproportionately Impacted

EDO Energize Denver Ordinance

EFR Electrification Feasibility Report

EOC Energy Outreach Colorado

EPP Electrification Pilot Program

ESPM ENERGY STAR® Portfolio Manager

EUI Energy Use Intensity

EV Electric Vehicle

HVAC Heating, Ventilation, and Air Conditioning

HVAC-R Heating, Ventilation, Air Conditioning, and Refrigeration

ITC Investment Tax Credit

kJ Kilo-Joules

kWh Kilowatt hour

Level-2 EV Charging Station

LED Light-Emitting Diode

MW Megawatt

NEEP Non-profit Energy Efficiency Program

PTC Production Tax Credit

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We thank you for your interest in and support of this project.

Please do not hesitate to contact us to discuss your organization's greening projects and goals.

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