



Guide to Commercial Energy Efficiency and Renewable Energy Incentives

EcoAction Partners has built this guide to help commercial property owners make their buildings more energy efficient, help you access resources for installing solar power, and help you understand the world of electric vehicles. This is a complicated and technical undertaking, so we have divided this guide into sections. Please contact EAP with any questions and we would be happy to help you navigate this document.

- Electric Vehicles and Chargers
- Weatherization Upgrades
- Energy Efficiency
- Renewable Energy
- Electric Service Upgrades
- Outdoor Electric Power Equipment
- Examples of how Rebates and Tax Credits can be applied
- Solar Panel Case Study
- Example of Investing in a Heat Pump

Electric Vehicles and Chargers

The Basics-

Electric fleet vehicles have the advantage of costing less to fuel and maintain. There are also federal and state incentives that can make your vehicle less expensive. The advantages of EVs can be difficult to understand without becoming informed about how they work and how they may or may not be the right choice for you. Plug in hybrids do not qualify, even though they are pretty awesome for our area.

- General Information on EVs [HERE](#)
- Fleet information [HERE](#)
- Federal information [HERE](#)
- Colorado incentives [HERE](#)
- IRS Guidance for EV Rebates [HERE](#)
- EV Credit Guide [HERE](#)
- Article about EVs and Tax credits [HERE](#)
- Colorado's EV website [HERE](#)
- Colorado Resource to answer questions about EVs [HERE](#)
- Federal page with Colorado programs [HERE](#)

Weatherization Upgrades



The Basics-

Before you invest in new efficient technologies, appliances, and renewable energy, it makes sense to make your building envelope as efficient as possible.

- Energy Assessment Programs- There are programs and contractors who can assess your building's energy use and assess where you could make your building more efficient.
 - Find general information about energy audits [HERE](#)
 - SMPA offers rebates to help you pay for an energy audit [HERE](#)
 - BHE offers free energy evaluations [HERE](#)

- C-PACE- Colorado's Commercial Property Assessed Clean Energy program offers low interest loans for businesses to upgrade their energy efficiency, renewable energy, and water conservation.
 - C-PACE website [HERE](#)
 - C-PACE Information site [HERE](#)
 - Energy Outreach Colorado [HERE](#)
 - SMPA Energy Audits Info [HERE](#)
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- DIY Weatherization- Making hot or cool air requires a lot of energy. Keeping that air where you want it makes a lot of sense. A well sealed and insulated space takes dramatically less energy to heat or cool.
 - Seal cracks and gaps between the inside and outside of your building
 - Add insulation in walls, ceilings, and crawl spaces
 - Information for efficiency(for homes but applies to commercial) [HERE](#)
 - Energy saving ideas [HERE](#)
 - BHE Efficiency rebates for gas [HERE](#)
 - BHE Efficiency rebates for Electricity [HERE](#)

- Use energy where and when you need it
 - Programmable thermostats help you manage your energy use based on when and where you need it.
 - Consider occupancy switches or timed lighting systems
 - LED bulbs are ultra efficient and an easy cost savings strategy
 - All SMPA rebates [HERE](#)

Energy Efficiency

● **Efficient Appliances**

The Basics-

The latest electrical appliances have never been more efficient. Further, renewable energy generation comes in the form of electricity, so your electric appliances will be ready to be powered by more and more renewable sourced electricity as renewable energy grows. There



are also many opportunities to get tax credits and rebates when you buy high efficiency electric appliances.

- Here is information regarding the various types of high efficiency electrical appliances that are coming onto the market. [HERE](#)
- SMPA Resources [HERE](#)
- BHE Efficiency rebates for gas [HERE](#)
- BHE Efficiency rebates for Electricity [HERE](#)
- Colorado will begin a federally funded rebate program later in 2023. Info [HERE](#)

- **Mechanical Systems**

The Basics- Mechanical systems heat your water and heat or cool your business space. These are the biggest users of energy in your building. Upgrading mechanical systems can reduce your energy bill! Heat pumps are very efficient at heating and cooling.

- Information on Heat Pumps [HERE](#)
- BHE Efficiency rebates for Electricity [HERE](#)

Renewable Energy

The Basics-

Solar panels continue to become more efficient and solar installations are becoming a common feature in our landscape. You can access solar energy through a roof top installation or investment in community solar. Pairing a solar system with an EV can reduce your transportation costs. You can also access a variety of incentives that will make your solar energy less expensive.

- A solar array on your home can offset your energy bill and create clean energy for your consumption..
 - General Information [HERE](#)
 - SMPA Renewables Rebates [HERE](#)
 - SMPA general rebates [HERE](#)
 - Here are resources to help you access rebates, incentives, and tax credits to make your investment less expensive
 - Federal Tax Credits information [HERE](#)
 - Guide to Business Upgrades Tax Credits [HERE](#)
 - Home Owners Guide [HERE](#)
 - Calculator to estimate your IRA savings [HERE](#)
 - Loan Resources- [HERE](#)

Electrical Service/Panel Upgrades

The basics- As people move to electric vehicles and efficient electric appliances, their electric service equipment may need to be upgraded to handle the extra load. If your



service panel/breaker box is more than 20 years old, less than 100 amps, or if all of the spaces in the box are full you will probably need to have an electrician install a larger service panel. This can be expensive but there are rebates and tax incentives that can offset the cost.

- Federal Guide for Electrification in Homes- [HERE](#)
- Colorado Incentives for Panel Upgrades [HERE](#)

Outdoor Electric Power Equipment

The Basics- New battery technology has made electric outdoor power equipment a great option. Imagine not having to struggle to start your old lawnmower or chainsaw. You can give your lungs a break by not breathing all of that exhaust, too. Rebates on this equipment include battery and plug in models.

- SMPA's rebates for Electric Equipment [HERE](#)
- Colorado will begin a rebate program later in 2023

Examples of how Rebates and Tax Credits can be applied

- This downloadable guide has a variety of scenarios for electrification. [HERE](#)
- This is a guide to IRA incentives [HERE](#)
- Here is a guide to calculating rebates and tax incentives [HERE](#)

Solar Panels Case Study

Here is an example of an actual solar project bid for a home in Ouray. A business may have a slightly larger system. Every project will be different depending on the household energy use. This project is slightly oversized to accommodate a future electric vehicle charger and electric thermal storage space heater.

Typical Residential System= 3.6kW

- Estimated cost without rebates= \$20,000
- SMPA Rebate= \$300
- Federal Tax Credit= 30% of Investment = \$6000 Tax Credit
- $\$20000 - (\$6000 + \$300) = \$13,700$ Estimated cost cost of project

The system will eventually pay for itself in about 10-15 years and will ultimately have a positive cash flow before the end of its lifespan. Here is SMPA's page on [NET METERING](#).

You can estimate the production of a possible solar array [HERE](#). You can calculate your carbon footprint offset with this [CALCULATOR](#).

- If your system generates 5180kW per year it will offset 3.7 Metric tons of CO2 per year. That is the equivalent of 9400 miles of travel in your typical car.



You can also add the cost of the project and its energy production to your total home equity.

An Example of investing in Heat Pumps

These numbers are estimated. Check with an HVAC provider to get accurate numbers.

- A typical “3 ton unit”, which can heat/cool 1500 sq ft will cost around \$6-8000.
- Smpa offers a rebate of up to \$3000. This brings the cost down to around \$4-5000.
- Federal Rebate. A tax credit covers 30 percent of the costs of purchase and installation, up to \$2,000 per year.
- [Article about heat pumps](#)