

# CLIMATE ACTION TOOLKIT

## FIGHT CLIMATE CHANGE IN COLORADO

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Climate change can seem like an overwhelming problem to solve, but if you refocus your perspective on the actions within your control, you'll realize that you have the ability to make positive change. While local, state, and federal governments can enact policies that would speed up the pace of emissions reductions, your individual actions can not only make a dent in your community's overall emissions, but they also demonstrate to others – your family, friends, and neighbors – that these behaviors matter. By taking action every day, you help to create new social norms for our community, and that's a big change!

The following is a list of behaviors and their impacts on climate change. We've arranged these according to the largest sources of emissions in our community: energy, transportation, and consumption and waste. Some require more effort than others, so pick a few to start with and work your way through the list.

### START BY CALCULATING YOUR CARBON FOOTPRINT

Do you know how many tons of greenhouse gases you emit each year? Calculate your carbon footprint to get an idea of how you compare to the rest of the world and what your biggest areas for improvement are.

Get started with EPA's [Household Carbon Footprint Calculator](#). You'll need an energy bill handy for best results.



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## ENERGY

### ENERGY



Colorado program.

#### UPGRADE THE LIGHTS IN YOUR HOME TO LEDs

Sorry, Thomas Edison – LEDs are about 90 percent more efficient than traditional incandescent lightbulbs, saving energy and therefore emissions. In 2017, LED bulbs used around the world reduced the emissions from lighting by 570 million tons of CO<sub>2</sub>, equivalent to removing nearly 111 million cars from the road. LEDs have significantly dropped in price over the last few years, and HC3 provides free LED bulbs for residents who enroll in our Energy Smart

#### INSULATE AND SEAL AIR LEAKS

Do you have holes in your house? Even if you don't realize it, you probably do. All the tiny gaps and cracks in a home allow air to escape, meaning that you're using more energy than you need to in order to keep your house warm. In fact, air leaks can be responsible for up to 40 percent of your heating costs. And if your home isn't properly insulated, you're losing more heat.

Find out how your home performs by getting a [home energy assessment](#), and then make the improvements suggested in the report. HC3 has rebates to help offset the cost of the assessment and improvements. Join the over 250 Summit locals who have reduced their emissions by over 2 tons per household each year.

#### BUY RENEWABLE POWER

In 2015, 29 percent of the U.S.' carbon emissions came from electricity production. This should be no surprise because most of our electricity is still generated by burning fossil fuels. If your electricity provider is Xcel Energy, about 36 percent of the electricity that is delivered to your home is already renewable. Take that up a notch by signing up for one of [Xcel's renewable energy programs](#). For minimal extra cost, you can subscribe to wind or solar power and offset all your home's electricity use. Participating in renewable energy programs is a great way to demonstrate to utility companies that consumers want clean energy!



#### WASH YOUR CLOTHES IN COLD WATER

Almost 90 percent of the energy consumed by your washing machine is used to heat water. If your clothes are just lightly soiled, there's no reason to use hot water for washing. Switching the water temperature to the warm setting will cut your washer's energy use by half and using cold water will reduce energy use even more.

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## ENERGY & TRANSPORTATION



### UNPLUG THE VAMPIRES

On average, Americans have about 65 devices plugged into home outlets, and many of our electronics consume electricity 24/7 – even when we’re not using them, or we think they’re turned off. This energy drain costs us about \$165 a year on average and is equal to the electricity produced by 50 medium sized power plants! Cut the flow to these energy-suckers by unplugging electronics in rarely used rooms (like a TV in a guest room) and plug other devices into power strips with switches. Turn off the power strip when you’re done using all your devices, and they’ll truly be turned off.

## TRANSPORTATION

### DRIVE LESS

Transportation is a huge source of greenhouse gas emissions. The typical passenger vehicle emits about 4.7 metric tons of carbon dioxide each year – that’s like releasing five elephants from your exhaust pipe. In the U.S., we equate cars with independence and freedom, and it can be hard to give up these values. But for every mile we don’t drive, we can save about a pound of carbon emissions.



In Summit County, we have great options for **free public transportation**. If you live near a bus stop, try to arrange your schedule so you can take the bus to work. Or find a co-worker to carpool with. When running errands, plan to go a number of places at once to eliminate the need for multiple trips.

### SWITCH TO AN ELECTRIC CAR OR GO CAR FREE

After electricity, transportation is the largest source of greenhouse gas emissions in the U.S. The biggest contributors to transportation-based emissions are passenger vehicles and light-duty trucks. Yet electric vehicles (EVs) are on the rise, with several car manufacturers ceasing production on gasoline models in the coming years. Some analysts predict that EVs will make up over half of all new car sales in the U.S. by 2040.

EVs aren’t completely emissions free. But even when considering the life-cycle emissions associated with manufacturing, driving, and disposal (or recycling), EVs still generate 50 percent fewer emissions than a comparable gasoline-powered car. And the emissions from manufacturing



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an EV are offset after 6 – 16 months of driving. Although not all EVs are charged using 100 percent renewable power, most Americans live in regions where there is already renewable energy on the grid. Remember that 36 percent of the electricity on Summit County's grid is currently renewable, and that number will increase to 55 percent by 2026. As our grid energy becomes cleaner, the benefits of driving electric only increase.

Electric cars are expensive, but prices should continue to drop as battery technology improves. State and federal **tax credits** are available for EVs, too. Many experts predict that electric cars will be competitively priced with gasoline vehicles by 2025. And while battery components and recycling remain a concern, there are several firms working to improve battery recycling, devising ways to reuse car batteries, and even designing batteries made of different materials altogether.

### OFFSET YOUR AIR TRAVEL

It's hard to say no to adventures to far-flung places or even a simple trip home to visit family. But air travel is a major contributor to greenhouse gas emissions. Just one roundtrip flight between Denver and New York produces 13 percent of the emissions that your car generates in a year. If you take multiple trips per year, aviation becomes a very large component of your carbon footprint.

One way to cut back on these emissions is to fly less. And when you do fly, try to fly direct; take-off and landing can account for up to 25 percent of a flight's emissions. You can also offset your emissions. When you buy offsets, you're investing in projects designed to reduce emissions, like renewable energy or carbon sequestration. There are a few factors to keep in mind as you search for an offset seller, like whether or not the project is permanent, but there are **good resources** and **standards bodies** for helping to select quality offsets.



If you'd like to offset your vehicle emissions, too, the **Colorado Carbon Fund** has Colorado-based projects that you can donate to. When you do, you'll get a special license plate to show-off your environmental dedication.



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## CONSUMPTION & WASTE

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#### REDUCE YOUR MEAT CONSUMPTION

Agriculture accounts for 11 percent of global emissions. Raising livestock is a resource-intensive process, and lamb and beef are at the top of the carbon-footprint-of-meat list. The production of these meats emits 3 – 4 times as many greenhouse gases as the next highest on the list – pork. But there's good news! Between 2005 and 2014, the carbon footprint of the average American diet shrunk by nearly 10 percent due to changes in food choices, especially decreased consumption of beef.

If each of us cut our beef consumption by just a quarter pound a week, the emissions reductions could be equal to taking 10 million cars off the road. This is a big impact, and it doesn't have to be a burden. Adopt **Meatless Mondays** in your household or become a **Reducetarian** – however you label yourself, find ways to make eating less meat a culinary adventure by trying new foods and recipes.

#### COMPOST

What happens when food ends up in landfills? It rots and produces methane, a greenhouse gas more powerful than carbon dioxide. In fact, landfills in the U.S. are the third largest source of methane emissions in the country. While Summit's dry climate minimizes methane production in our local landfill, composting has other benefits that help climate change. Applied to agricultural fields, compost provides nutrients and can be used in place of chemical fertilizers, which are often made with fossil fuels. Compost can also improve the ability of soil to sequester carbon.



If you don't have the space or desire to maintain a backyard compost pile, HC3's **Food Scrap Recycling** program provides an easy and convenient way to dispose of your food waste. All you need to get started is a container to collect your scraps in – you can use whatever you like, but we recommend a 5-gallon bucket with a screw-top lid.



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### RECYCLE

Recycling helps reduce greenhouse gas emissions by skipping several steps in the production process. Just think: When you recycle, new materials don't need to be extracted and transported, saving a lot of energy. For example, recycling aluminum reduces the energy needed to manufacture aluminum from raw material by 95 percent. If the U.S. could get its recycling rate up to 75 percent, the emissions reductions would be equal to taking 50 million cars off the road.

Fortunately, there are a few ways to recycle in Summit County. Visit one of the **free drop-centers** or sign up for **curbside pick-up** at home. If you live in a complex where waste services are provided by an HOA or property manager, advocate that recycling options are provided on site.

And don't forget the other two Rs. By reducing what you purchase in the first place and reusing items as much as possible, you also cut down on your overall emissions.

### EAT LOCALLY

Where does the food you buy come from? In most cases, the answer isn't close by. The average meal in the U.S. travels 1,500 miles from farm to plate. Long-distance shipping of agricultural products is the norm these days, and all that transportation is fossil-fuel intensive. Reduce the number of miles your food travels by purchasing locally grown products as much as possible. Shop at **farmers' markets** during the summer, **grow your own food**, or participate in a **community supported agriculture program**. When you visit the grocery store, look for the "**Colorado Proud**" logo. And start paying attention to the stickers on your produce. Do you really need to buy apples from Chile?



### BE A CONSCIOUS CONSUMER

At first glance, becoming a more conscious consumer might seem pretty easy, but it requires a lot of homework. Making purchasing decisions on auto-pilot is a lot easier than examining the impact

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## BECOME AN ADVOCATE

of every single product. For the truly committed, spend time researching the brands you buy, their sustainability practices, and the environmental impacts of their business. What does the company do to minimize their impact? Does the company contribute to any practices that contribute to climate change, such as deforestation?

When purchasing new appliances or water fixtures, look for labels like **EnergyStar** and **WaterSense**. These products are designed to be more energy and water efficient. Finally, don't forget to ask yourself if you really need something before you buy it. As Will Rogers said, "Too many people spend money they haven't earned, to buy things they don't want, to impress people they don't like."

## BECOME AN ADVOCATE

Once you start tackling the suggestions on this list, talk to your family and friends about what you're doing and why. Your efforts might inspire them to start adopting new behaviors, too! This ripple effect is how we create new social norms, but you have to share your efforts so that people actually know what's going on!

Take part in local, state, and federal discussions about climate change, energy, and conservation policies. Show up at council meetings, and call your representatives, both state and federal. And examine the environmental platforms of candidates running for office. Push candidates you're interested in to address the issues you care about. Your voice matters, but no one knows what you think until you open your mouth.



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