

# EcoAction Partners Annual Report 2022

San Miguel & Ouray Counties | Colorado







# Welcome!

We are excited to present EcoAction Partners Annual report! EcoAction Partners (EAP) was created in 2007 as a collaborative entity to facilitate sustainable solutions for our mountain communities. Since then, it has evolved to lead energy and waste programming across the region, track greenhouse gas emissions, and support jurisdictions, utilities, and our communities in reaching climate action goals. EAP has developed our programming over the years to bring together stakeholders to support collaborative solutions to both short- and long-term regional climate goals.

Our work is more important than ever as we are experiencing the adverse effects of climate change in our community. Rising temperatures, a reduced snowpack, and an increased number of wildfires have all demonstrated the unprecedented risk that we are facing. We are committed to supporting our region as we move towards a more sustainable future.

We are so grateful for all our partners in supporting our programming and efforts in reducing our greenhouse gas emissions, energy, and waste. We are thrilled to bring the Climate Action Plan to our region and support the next decade of collaborative climate planning and implementation. We look forward to continuing our programming and supporting triple bottom line solutions as we address the adverse effects of climate change on our community. Our programs are meant to respond to climate change in a way that not only mitigates risk, but creates new opportunity for residents, businesses, and visitors. We are excited to approach the next year of collaboration and innovation in our field and look forward to continuing our important programming across the region!

## Our Work:

-  Tracking progress toward regional greenhouse gas emissions reduction goals
-  Empowering sustainability actions through education and awareness
-  Reducing waste through recycling, composting and education
-  Promoting energy efficiency, weatherization and renewable energy

## Table of contents

Meet the Team .....	3
Greenhouse Gas Inventory .....	4
GHG - Forecast	
GHG - Natural Gas	
GHG - Energy Supply	
GHG - Energy Use	
Community Engagement .....	9
Sneffels Energy Board	
Climate Action Plan	
Outreach and Engagement	
Green Business Program	
Truth or Dare	
Waste .....	14
Compost Recycling & Trash	
Plastic Film	
Energy .....	16
Telluride Green Grants	
Colorado Affordable Residential Energy Program	
Thank You to Our Partners .....	18
Take Action .....	10

*Mission Statement: EcoAction Partners is a sustainability organization that tracks the region's greenhouse gas emissions and provides programs that reduce energy and waste.*



# Meet the Team



**Emma Gerona, Executive Director**



**Naala Richards, Office Administrator**



**Kim Wheels, Energy Specialist**



**Burton Richards, Rebate Administrator**



**Karissa Mielke, Energy & Outreach Programs Coordinator**



**Tyler Simmons, Zero Waste Coordinator**



**Jay Saxton, Energy Auditor**



**Kendra Held, Climate Action Fellow**

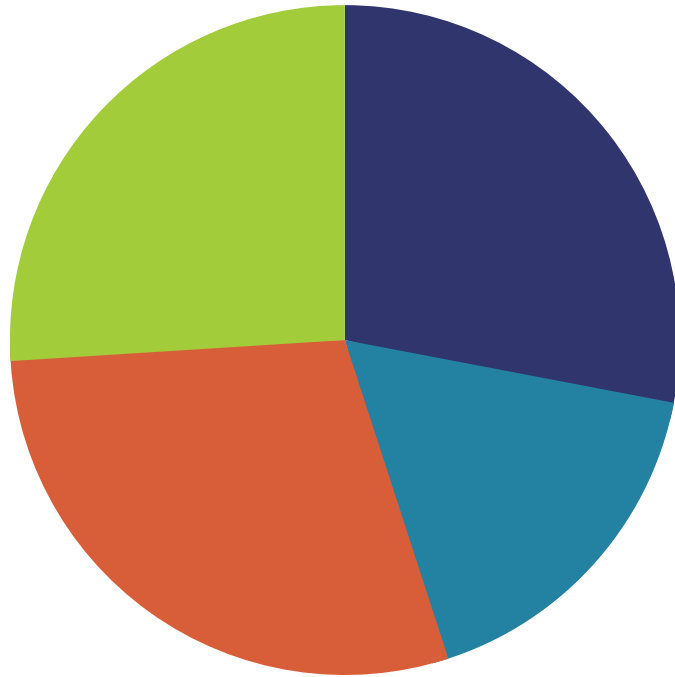


**Sean Hart, Energy Programs Coordinator**



**Jacque Hess, CARE Program Administrator**









San Miguel and Ouray County Emissions  
by Sector

**353,000**

**mt-CO2e produced in 2020**

## 2020 Greenhouse Gas Inventory

-  **Residential Buildings (28%)**
-  **Commercial Buildings (17%)**
-  **Transportation (29%)**
-  **Material Production:  
Food, Fuel, and Waste (26%)**

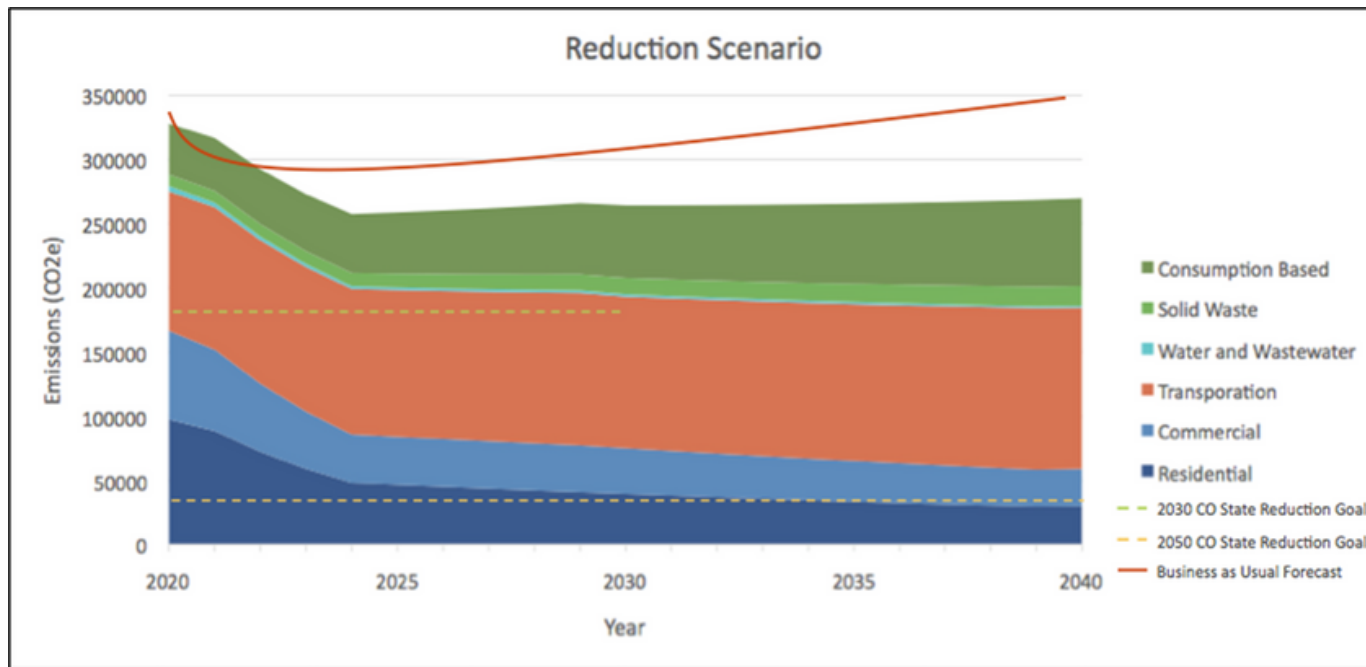
Since 2010, EcoAction Partners has maintained a Greenhouse Gas Inventory for the region.

- Buildings, at 45%, produce the majority of our GHG emissions. This includes a reduction associated with electricity offset by the purchase of REC's, without which building emissions would produce well over 50% of our region's emissions. Thus, reducing GHG emissions associated with buildings remains our highest priority.
- Transportation related GHG emissions from vehicles and air travel account for 29% of our emissions. Air travel includes the Telluride Airport (TEX) and a percentage of travel through the Montrose Regional Airport (MTJ), as almost 75% of passengers through MTJ are visiting our region.
- Material production, including food, fuel production and waste, account for the remaining 26% of our emissions. As a remote, rural region with a tourist-based economy, tracking these emissions is important to us, as we recognize our responsibility to reduce our overall contribution to global emissions.





# GHG Emissions - Forecasting



EcoAction Partners uses ICLEI's ClearPath online GHG tracking and analysis tool, the leading online platform for completing GHG inventories, forecasts, climate action plans, and monitoring at the community-wide or government operation scale. ClearPath provides GHG forecasting and tracking tools to guide us toward our GHG reduction goals. This forecast shows the need to implement creative and comprehensive local action to reach our 2030 and 2050 emission reduction goals.

## Tracking Emission Trends

This chart displays the combined effects of both high-level and localized reduction strategies, including but not limited to:

- Tri-state commitment to 50% renewables by 2024 & 100% by 2040
- Electric Vehicle (EV) adoption
- Conversion of residential and commercial spaces from natural gas heating to electric heat pumps or boilers
- Improved building energy codes
- Increased ratio of renewable energy in our energy supply mix

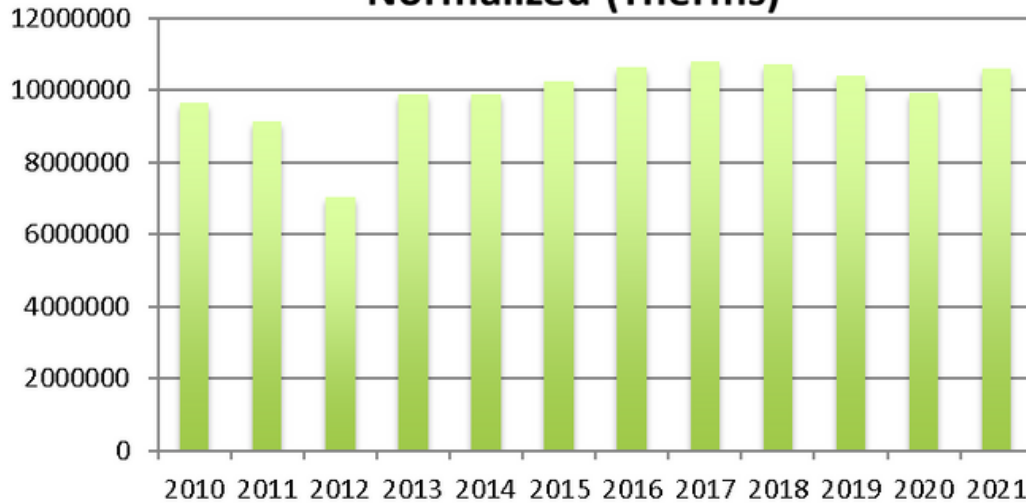
This pathway shows that we can significantly reduce our GHG emissions associated with both residential and commercial building energy use. However, if our population and tourism economy continues to grow at the current pace, we will need to implement creative comprehensive policies and actions to reduce our emissions associated transportation and material consumption to reach our goals.

The red "business as usual" forecast line includes TriState's emission reduction promises detailed in their Responsible Energy Plan – 50% renewable supply by 2024, and 100% renewable supply by 2040. Though this trajectory will noticeably reduce our emissions associated with grid supplied electricity, it will not bring our region in line with either 2030 or 2050 GHG reduction goals without implementing additional localized reduction strategies. The increasing trend of GHG emissions is due to a growing population and tourism economy.



## GHG Emissions - Natural Gas

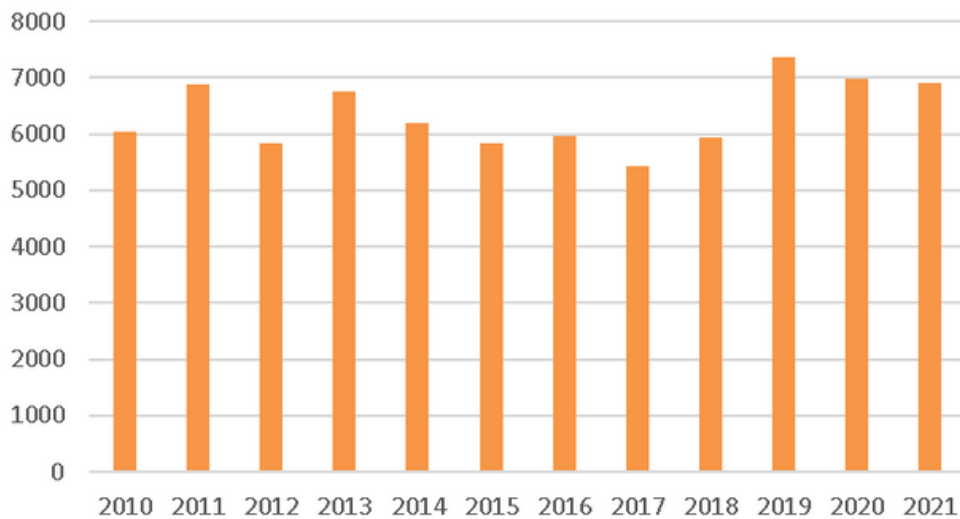
**Regional Natural Gas Use-  
Normalized (Therms)**



Natural gas is primarily used in our region for heating buildings and water. Gas use fluctuates with outdoor winter temperatures so the data has been normalized for changes in weather, to better see usage trends outside of weather fluctuations.

We saw a slight increase in our 2010-2021 regional natural gas use.

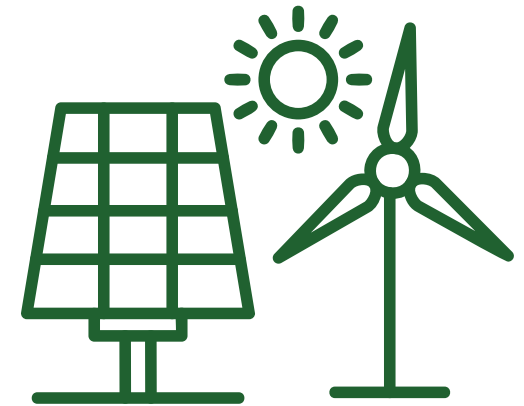
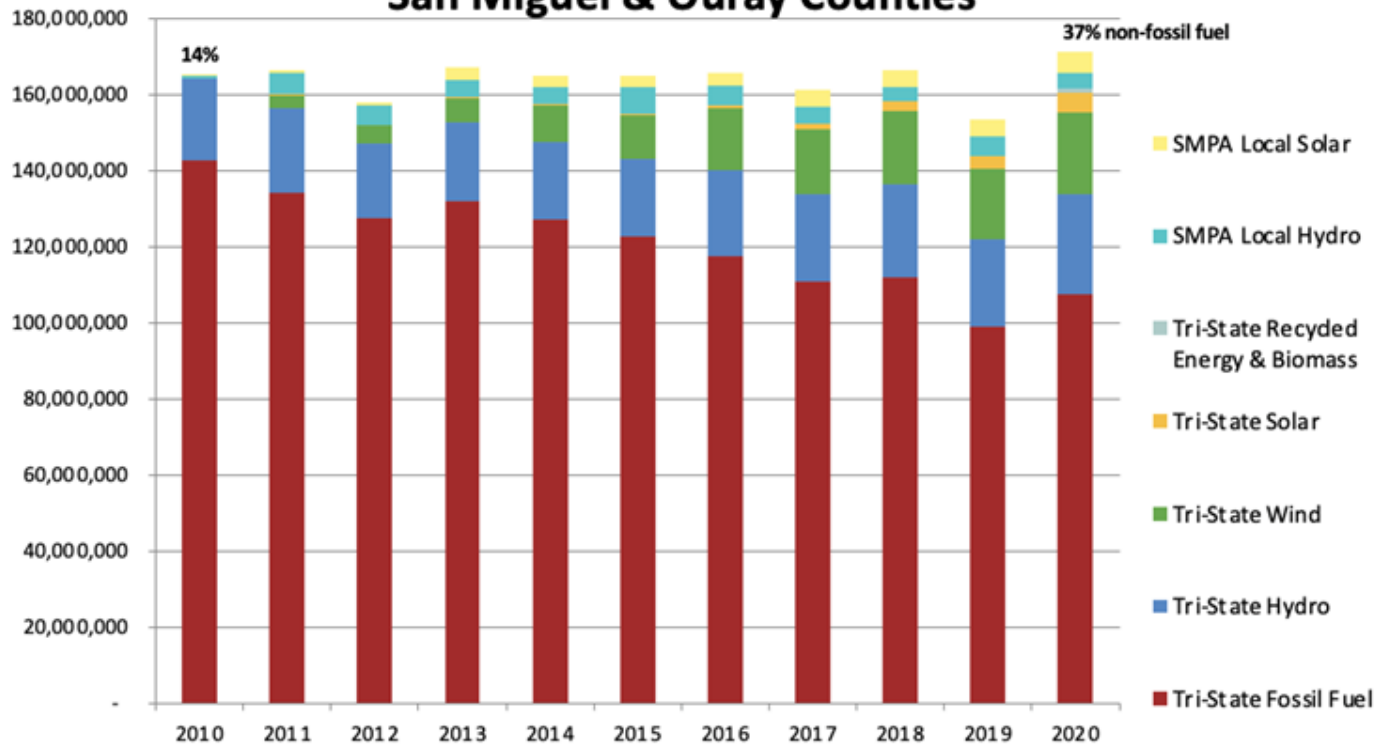
**Heating Degree Days**



This chart helps us understand how cold it is in our region from year to year, and indicates the amount of heat needed to maintain comfortable building temperatures. \*Heating Degree Days (HDD) equals the number of degrees that a day's average temperature is below 65 deg Fahrenheit, the temperature below which buildings need to be heated. For example, if the day's average temperature is 50 deg F, its HDD is 15. This chart shows the annual sum total of HDD values in a given year.



**SMPA Electricity by Source (kWh) for San Miguel & Ouray Counties**



**37%**

**Renewable  
resources**

SMPA provides electricity to homes and businesses in our region. Between SMPA owned resources, and our power provider, Tri-State, we currently have 37% renewables in our electricity supply mix. The remaining 63% of our energy supply currently comes from fossil fuels. Since 2010, the renewable resources in our energy supply have increased from 14% to 37%.

**Beneficial Electrification** is now a key focus in our region. With the percent of renewables in the supply mixture, it is now beneficial (i.e. reduces GHG emissions) to switch to electricity from other fossil fuel sources (i.e. gasoline to electric vehicles, fossil fuel heating to cold climate air source heat pumps).



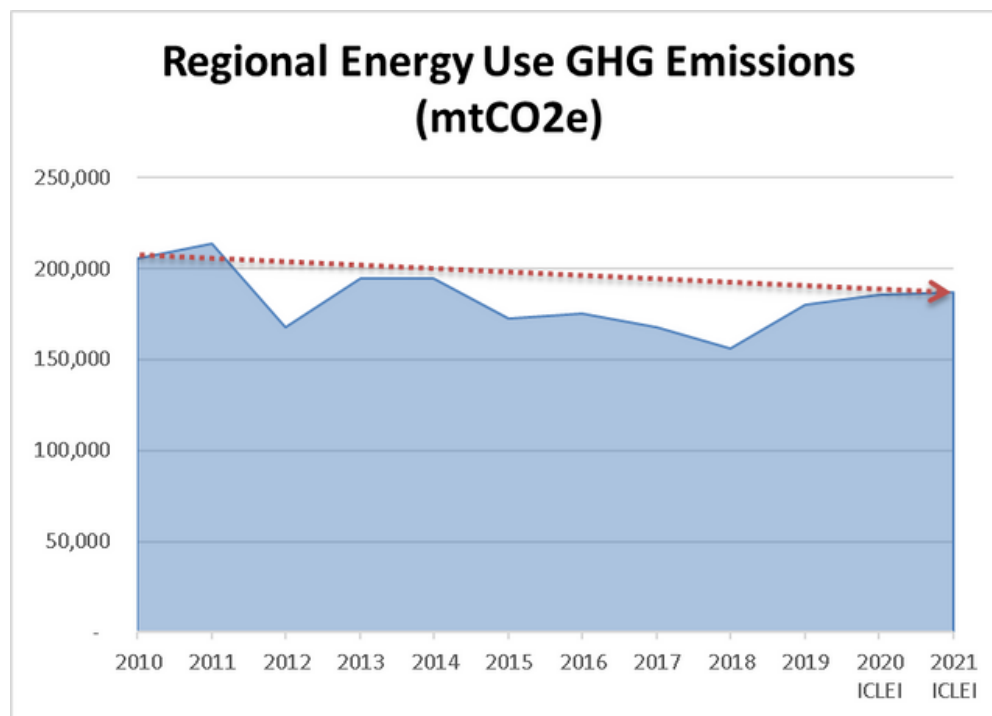


## GHG Emissions - Energy Use

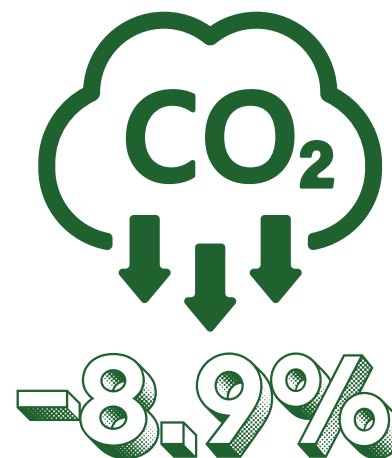
Regionally, our population has increased by approximately 1,320 people since 2010, an increase of 11.2%. Though population increases can support economic sustainability, it also drives increases in energy use and GHG emissions, and strains housing and infrastructure resources.

Despite a growing full-time population and tourism economy, regional emissions fell by 8.9% between 2010 and 2021. This indicates success in increasing renewable energy use and implementing regional efficiency measures.

This data includes electricity, natural gas and propane.



**population  
increase**



**GHG emission  
decrease**



## The Board

The Sneffels Energy Board (SEB) was created by EcoAction Partners in 2009 to support collaborative efforts in our remote and rural region as we collectively face the challenges associated with climate change. The board brings together local leaders to coordinate planning, community engagement, project implementation and policy change at the local and state levels.

The Sneffels Energy Board is made up of government and community representatives from San Miguel and Ouray counties, the towns of Ridgway, Ophir, Norwood, Telluride, Mountain Village, the City of Ouray as well as utility partners, San Miguel Power Association and Black Hills Energy.

Partners of the board meet quarterly to share best practices, design successful regional programs, leverage grant funding, identify new opportunities and analyze progress made to-date.

## 2022 Accomplishments

- Finalized regional Climate Action Plan: supported year-long outreach and education initiatives, engagement of stakeholders and integrated public input into the final document.
- Launched the Renewable Energy and Beneficial Electrification League. Hosted the first of ongoing quarterly meetings to support electrification efforts and bring together regional energy experts.
- Began working with a Western Masters of Environmental Management student to create a regional Electric Vehicle Readiness Plan, one of the actions identified in the Climate Action Plan, and a necessary step to open new State and Federal funding channels for our partners.
- Attended Mountain Towns 2030 Summit with several SEB partners.



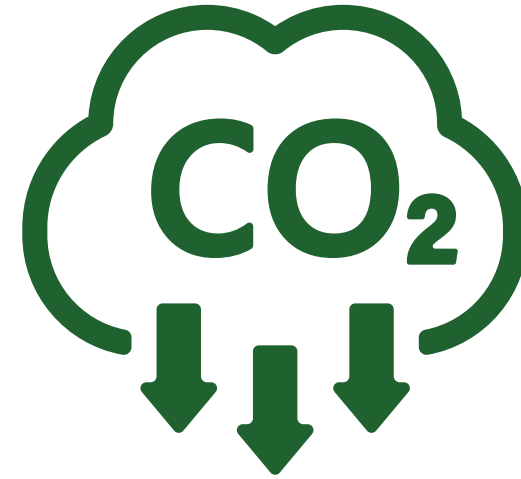
# Regional Climate Action Plan

The Climate Action Plan was completed by the Sneffels Energy Board and EcoAction Partners in 2021. We have now transitioned our focus to support partners with implementation and tracking. EcoAction Partners is excited to support our partners in taking action to achieve CAP goals and objectives.

The Climate Action Plan focuses on 8 key sectors. Each sector has specific objectives associated with it and each objective has actions outlined to achieve it. There are 74 identified actions meant to achieve 21 objectives over the next 10 years. These actions have been evaluated for their GHG reduction potential and the additional co-benefits including, economic, environmental, public health and safety, equity, and resiliency.

Specific regional actors from governments, utilities and other partnering organizations have been identified to lead progress toward these initiatives. Collaborative groups like the Sneffels Energy Board are crucial in maintaining updates from government actors regarding their progress toward goals and actions outlines in the CAP, as well as a space to receive feedback from entities facing similar challenges and opportunities.

If you are curious about the Climate Action Plan, please visit our website to view the full document.



50% BY 2030

90% BY 2050

## GHG emissions reduction goals



**Community Engagement & Policy**  
Stakeholder partnerships and ownership of policy and decision-making



**Energy Supply**  
Generation of our community's electricity



**Building Energy Use**  
Energy used by commercial and residential buildings



**Transportation**  
Emissions associated with on-road movements and aviation operations



**Waste**  
Trash, recycling, and compostable materials; landfill reduction and diversion



**Food**  
Emissions from food production, transportation, and storage



**Water**  
Water supply, use, pumping, and treatment and watershed health



**Land**  
Land use and health, sequestration opportunities, and agricultural use





## EcoAction in Action

Community outreach and engagement is key to the success of our programming. Reaching our regional emissions reduction goals will not happen without the support of our whole community. Individual actions make a big difference, and we need to step up as a community to prioritize policies and partnerships that move us toward our collective goals. We aim to see community ownership of our programs, and our outreach and engagement efforts help to do just that.

Many of our outreach initiatives this year focused on engagement with the Climate Action Plan. We had informational tables at the regional farmers markets, hosted community and government worksessions, and started a monthly environmental happy hour in partnership with Sheep Mountain Alliance, the San Miguel Watershed Coalition and the Telluride Institute to get together and talk all things sustainability. We were thrilled to receive so much valuable input on your climate priorities and be able to develop an action plan that reflects the diverse needs of our regional communities.

Throughout 2022 we presented to over 1300 people at 40 different events, hosted 13 Climate Action Plan worksessions, and presented to each of our eight regional governments.



Sharing program updates at the Environmental Happy Hour



Enjoying a locally sourced meal at the Harvest Dinner Fall Fundraiser



Educating Telluride Bluegrass attendees on local programming



## Building a Sustainable Business Community

The Green Business Program is a membership program creating a sustainable business community while reducing greenhouse gas emissions. Member businesses get access to a plethora of resources and receive customized support to achieve their sustainability goals. We can support a business by conducting an energy assessment walkthrough and working on a customized action plan tailored to their sustainability goals. We provide members with free materials including smart thermostats and plugs, aerators and more! Green business members have access to our in-house weatherization support for a highly discounted hourly rate for bigger projects including air sealing, installing insulation and more!

This year our team helped local businesses by supporting weatherization upgrades, rebate applications, and project consultation. We insulated hot water pipes, installed smart thermostats, supported composting through Dirty Sturdy's, installed LED's, developed education campaigns and resources and so much more!

## Member Benefits

Green seal window display

Low cost energy assessment

Roundtable events

Highlight of business throughout community

Sustainability resource hub

Free weatherization materials

Grant & rebate assistance

Customized sustainability plan

Access to discounted in house contractor

And much more!

## Meet the Memembers







## Inspiring the Next Generation

An elective school program, Truth or Dare challenges students to significantly reduce their carbon footprint and conserve resources. Students are invited to participate in "dares" such as unplugging electric gadgets when not in use, using reusable containers, and turning off lights when leaving a room.

Students earn points for each sustainability dare they do while also learning the "truths" associated with them. We are able to calculate the GHG reduction with each dare and award the top three students in each school who reduce the most GHG emissions.



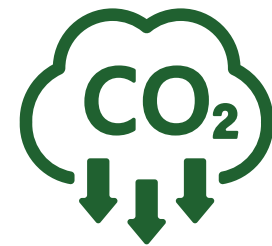
657

Students  
participated



30,172

Dares were  
completed



17

Metric tons of  
carbon dioxide  
emissions saved





## Festival composting, recycling, trash (CRT)

EcoAction Partners began working with local festivals in 2010 to support the goal of 100% composting of all organic waste. In 2022 we worked with Telluride Jazz Festival, the Telluride Blues and Brews Festival and the Telluride Bluegrass Festival to support their waste diversion efforts. We coordinated staff and volunteers to monitor CRT stations and help festival attendees sort their waste correctly. These events host between 3,000-15,000 participants each and we are happy to share that we had great success at all three events.



Volunteer helping festival attendees sort their waste



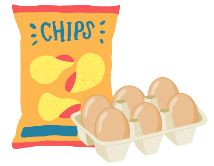
3

**Festivals**



120

**Pounds of  
plastic film recycled**



580

**Pounds of  
solid food donated to  
the local food bank**



18

**gallons of  
liquids donated  
to the local food  
bank**



218

**Cubic Yards of  
food waste composted**



394

**Cubic Yards  
recycled**



# Plastic Film Upcycling

EcoAction Partners' Plastic Film Upcycling Program provides a free solution for the large amount of plastic film seen by local businesses and residents by connecting our local plastic film waste stream with Trex Decking to upcycle this material into outdoor decking and furniture. The program offers a key recycling service to community members, governments, events and businesses across the region.

The Plastic Film Program saw increased utilization and support across the region last year. EAP upcycled over 2,100 pounds of plastic film through this program in 2022, not including volume transported by businesses directly to the City Market collection location in Montrose, without tracking by EAP staff.

We were excited to expand the recycling program at the Telluride Bluegrass Festival and collected over 120 lbs. from festival vendors and attendees.



Volunteer taking plastic film waste to drop off site



# 2,100

**pounds of plastic film  
recycled**



## Green Grant Projects

- Replacing windows and improving insulation to increase energy efficiency for homes and organizations
- Upgrading heating equipment
- Composting units
- Beneficial electrification  
Converting from fossil fuels to highly efficient electrical systems (heat pumps, electric vehicles, hot water heaters, cooking stoves, etc.)

The grant applications were extremely competitive this year. In the end, the review committee based their selection on tangible and measurable outcomes, supporting local residents and organizations with comfort and energy use reduction in their buildings, higher matching of funds, and support to existing operations that are already reducing GHG emissions.



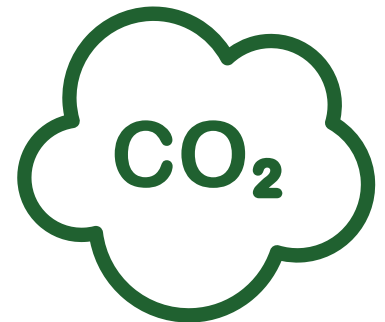
7

**Grant  
awardees**



\$75,000

**funding  
awarded**



170

**Metric tons of  
CO2 reduced  
since 2019**





The CARE program in partnership with Energy Outreach Colorado, SMPA and Black Hills Energy provides free energy assessments and thousands of dollars in cost effective energy efficiency improvements such as weatherization, insulation, energy efficient appliances, and a new furnace or water heater, all at no cost to the participant. The program covers low and middle-income residents with up to 80% of the area median income. In 2022, our CARE Program served 37 homes across the region.

We are working with an AmeriCorps VISTA member to develop and implement a more equitable outreach strategy and address any barriers to entry for this key program to ensure that these services are being utilized by community members who will benefit most from this program. Weatherization efforts from the program have resulted in an annual reduction of ~280MtCO<sub>2</sub>e.

## In 2022 we addressed gas leaks, heating issues, insulation, refrigerators and more!



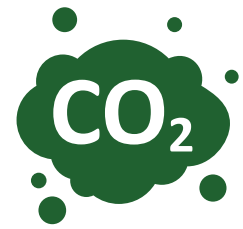
**37**

**Homes serviced**



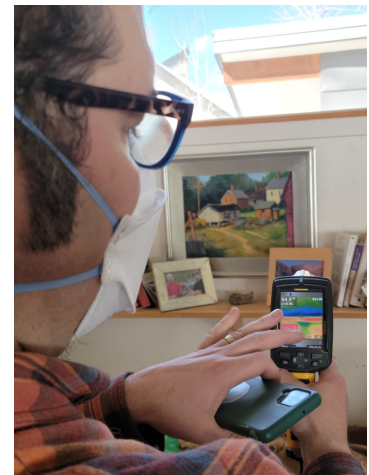
**\$116,000**

**In weatherization upgrades**



**28**

**Tons of estimated annual CO<sub>2</sub> savings**



# Thank you to our Partners

## **Funding Partners:**

- Alpine Bank
- Black Hills Energy
- Community Coalition for Arts and Special Events
- Energy Outreach Colorado
- Ouray County
- Ridgway Ouray Community Council
- San Miguel County
- San Miguel Power Association
- Telluride Bluegrass
- Telluride Foundation
- Town of Mountain Village
- Town of Ophir
- Town of Ouray
- Town of Ridgway
- Town of Telluride
- West End Pay It Forward Trust

## **Staff:**

Emma Gerona, Executive Director

Kim Wheels, Energy Specialist

Jaqueline Hess, Weatherization Programs Administrator

Burton Richards, Rebate Administrator

Tyler Simmons, Zero Waste Coordinator

Sean Heart, Energy Programs Coordinator

Jay Saxton, Weatherization Programs Auditor

Karissa Mielke, Energy and Outreach Programs Coordinator

Mollie Theis, Education and Outreach Coordinator

Naala Richards, Office Administrator

Kendra Held, Climate Action Fellow & AmeriCorps VISTA

## **Board Members:**

Lance Warring, Board President

Patrick Berry, Vice President

Todd Brown, Treasurer

Tobin Brown

Meagan Preece

Kathy Green

Dan Enright

Raphaella Hsu-Flanders



# Take Action and Support EAP

1.

**Educate:** Explore the Regional Climate Action Plan to learn about our regional collaborative sustainability efforts.

2.

**Engage:** Join in opportunities to participate in EAP programming and connect with our staff.

3.

**Give:** Donate and support our programming by scanning the QR code.

