11 local government partners
joining together in a shared mission
to make Garfield County
the most energy efficient county in the U.S.

Garfield Clean Energy 2023 Annual Report

Feb 9, 2024 • Prepared by CLEER: Clean Energy Economy for the Region
(970) 704-9200 • www.GarfieldCleanEnergy.org

2023 program overview

In 2023, Garfield Clean Energy programs made meaningful progress on our goals. Some of our key successes for 2023 included:

- **42** homes implemented energy savings measures through the ReEnergize program
- **21** commercial property owners received energy coaching
- **$132,368** saved on energy bills for residents, businesses, and governments
- **137** EV charging stations were installed
- **40** e-bikes were distributed to low-income residents through the e-BikeThere program
- **922** participants in events throughout the year

Residential Program

GCE's residential program provides energy efficiency consulting to Garfield County residents. The goal of the program is to help each client understand their energy use and take steps to reduce energy use in their home. This includes connecting participants with available funding sources, rebates and tax credits. The measures that were taken and reported to the CLEER team are then tracked for reporting.

Residential Program Summary

Total Residential Activity Summary	Q1	Q2	Q3	Q4	Annual Total
Residential upgrades completed	12	63	66	33	174
Residential Coaching Requests	28	7	3	74	112
Total project costs	$61,080	$109,078	$138,354	$136,843	$445,354
Total rebate amount	$21,548	$42,243	$56,520	$45,072	$165,382
Estimated annual energy cost savings	$7,257	$16,486	$32,831	$9,831	**$66,405**
Annual Carbon Savings (Tonnes/yr)	36.82	72.91	163.61	45.92	**319.26**

Residential totals include ReEnergize projects and savings achieved from these projects

ReEnergize Program Summary

ReEnergize: A County funded low/middle income rebate program that serves residents of Garfield County in assisting with weatherization and energy efficiency upgrades.

- **Program upgrades include:** Water heaters, windows, insulation, air sealing, LEDs, programmable thermostats, Energy Star fridges, Air Source Heat pumps/mini-split heat pumps

2023 ReEnergize Garfield County Program to-date	Qualified in 2023	Upgrades complete	ReEnergize funding allocated	Total paid for completed projects	Annual cost savings
Parachute / Battlement	6	16	$28,000	$14,570	$4,721
Rifle	6	13	$22,000	$22,000	$9,306
Silt	5	24	$21,533	$18,204	$3,847
New Castle	8	21	$26,000	$14,955	$11,751
Glenwood Springs	11	24	$26,000	$16,867	$13,961
Carbondale	6	11	$19,000	$16,405	$5,186
Countywide total	**42**	**109**	**$142,533**	**$103,001**	**$48,772**

CARE/WAP	**19**				
GWS LMI	**9**	**10**	**$33,000**	$15,648	$15,648
Waitlist	**7**				

As of 1/23/2024

CARE: Colorado Affordable Residential Energy program provides income-qualified Coloradans, in the 60-80% AMI bracket, in participating counties with free home energy efficiency upgrades for homeowners and renters. It is facilitated by Energy Outreach Colorado.

WAP: The Weatherization Assistance Program helps residents with an income less than 60% the state median income (SMI), and covers a variety of energy efficiency and weatherization home upgrades. Wap is a federal program facilitated by the Colorado Energy Office.

Glenwood Springs low-to-medium income (GWS LMI): This program is for Glenwood Springs Electric customers who earn 150% or less AMI. Most people have accessed this funding by applying for ReEnergize, but it is not necessary to do so. By utilizing these funds for GWSE customers, GCE was able to increase the households that could be served across the County.

Commercial Program

Commercial Coaching:
CLEER's Buildings Specialists provide energy coaching and technical support to businesses, governments, and other organizations throughout the County. Technical support includes identifying upgrades for customer-owned buildings, rated equipment performance verification, equipment recommendations, and research on rebates and tax credits available.

Commercial Program Summary

Commercial activity summary	Q1	Q2	Q3	Q4	Annual Total
Commercial upgrades completed	1	2	1	3	7
Commercial building walk-throughs and site visits	3	4	6	8	21
Commercial Coaching Requests	2	4	7	8	21
Annual Carbon Savings (Tonnes/yr)	13.19	32.73	166.14	13.12	225.18
Total project costs	$5,653	$6,696	$170,916	$44,634.24	$227,900
Total rebate amount*	$2,500	$1,596	$5,000	$7,500.00	$16,596
Estimated annual cost energy savings	$1,660	$4,120	$20,909	$1,652.83	$28,342

Upgrades that earn rebates often include lighting and HVAC improvements. Commercial walk-throughs entail an assessment of the building and are followed by a summary report detailing suggested improvements and financial support to make those improvements.

*Commercial rebates are available from Glenwood Springs Electric, Black Hills Energy, Municipal Energy MEAN, Xcel Energy, and Holy Cross Energy.

Commercial Program Direct Consultation Summary

Commercial entity	Community	Technical Consultation	Walk-through Date
Q1 consultation: 3			
Rodeway Inn- RFTA Employee Housing	GWS		1/11/2023
Glenwood Springs Historical Society	GWS		2/16/2023
Western Hotel	GWS		3/15/2023
Q2 walk-through/site visits: 4			
Ute Theater	Rifle		4/21/2023

Wapiti Commons Affordable Housing	Rifle		6/12/2023
RFSD Teacher Housing	Carbondale	6/21/2023	
Peppino's Pizza	Carbondale	4/26/2023	
Q3 walk-through/site visits: 6			
Environmental Process control	Carbondale		7/20/2023
KDNK	Carbondale		7/25/2023
Habitat for Humanity	Rifle		8/10/2023
Grand Valley Rec Center	Parachute		8/17/2023
Bookcliffs Art Center	Rifle		8/25/2023
New Castle Plaza	New Castle		9/28/2023
Q4 walk-through/site visits: 8			
1101 Village Rd	Carbondale		11/13/2023
1905 Blake	GWS		11/16/2023
VR Cabinet	New Castle		12/1/2023
Little Blue Preschool	Carbondale	12/11/2023	
VR Cabinet	New Castle	12/11/2023	
Grand Valley Rec Center	Parachute	12/11/2023	
Launchpad	Carbondale		12/11/2023
High Performance Hangars		12/18/2023	

Residential and Commercial Energy Code Adoption and Implementation

- A residential energy code workshop for contractors was put on in Rifle on September 14th. Attendees visited the Wapiti Commons housing project as a part of the workshop training.
- GCE hosted an HVAC training in Glenwood Springs in November to provide training on the new duct sealing requirements for the new International Energy Conservation Code.
- Energy modeling was completed that was needed to give Wapiti Commons/Habitat for Humanity access to significant building-performance based rebates from Xcel Energy. The program supported a GWS multifamily building owner to greatly improve heating and cooling in their rental units by offering technical and rebate support for a full HVAC upgrade.
- Through the program we also supported developers of an upcoming affordable housing project in Parachute by connecting them with funding options to help their planning process.

Advanced Energy Management

Program Summary

Garfield Clean Energy's Advanced Energy Management program tracks natural gas and electricity use for GCE member buildings and provides coaching on energy savings measures. This year we did this through:

- Tracking 240 utility bills monthly
- Monitoring 15-minute interval data for 36 GCE buildings
- Continuing our new Shutdown with Energy Star energy savings events over Thanksgiving, Christmas and New Years.

AEM savings Summary	Thanksgiving	Christmas	New Years	Annual Totals*
Buildings tracked per event	12	12	13	36
Total Event kWh Savings	1599	2419	1477	342,012
Percentage of energy savings achieved	3%	8%	5%	7%
Estimated Event cost savings	$176	$266	$162	$37,621

*The annual total compares August to December of 2022 and 2023. This is the time frame with the most complete data due to the transition that occurred in 2022. 2024 data will be compared to the whole year of 2023.

The top 5 performing buildings for the end of year Holiday Shutdowns were:

Top building totals for the three holiday shutdowns	Previous Year's kWh use	Current Year kWh Use	kWh Savings	Savings %
Parachute Town Hall	2097	1621	476	23%
Red Mountain Water Treatment	10722	8929	1793	17%
Garfield County Courthouse	13084	11154	1930	15%
Garfield County Sheriff's Office	20848	18210	2638	13%
Garfield County HHS Annex	6196	5796	400	6%
12 building total for holiday shutdowns	**105512**	**100047**	**5465**	**5%**

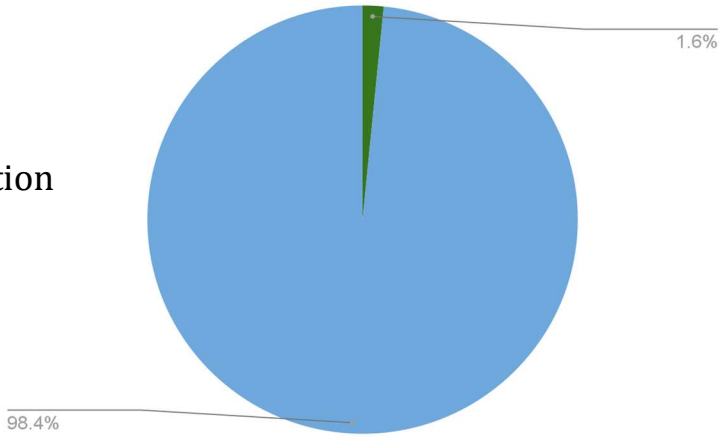
Transportation Program Summary

GCE's Transportation program used 2023 to begin the process of developing the EV readiness plan. In addition to this process, GCE supported the Clean Mobility Summit and an EV Ride and Drive event which allows people to experience an electric vehicle and learn about incentives available. Work done in Garfield County to support the clean mobility transition also supported Holy Cross Energy with purchasing a hybrid bucket truck, provided 40 ebikes, and supported the expansion of EV charging infrastructure throughout the County.

EVs - 893

Registered Vehicles in Garfield County 2023

Internal Combustion Vehicles - 55,940



Transportation Totals Helped by GCE	
Program	**Deliverables**
eBikeThere	Awarded: 40 Applications Received: 337
EV charging infrastructure	137 total: 83 Level 2 ports 44 DCFC ports
DERA - Diesel Emissions Reduction Act - A grant program to promote emissions reductions from legacy diesel engines	Holy Cross Energy: received a grant to replace a diesel bucket truck with a hybrid-electric bucket truck.

Events Summary

Garfield Clean Energy events and trainings 2023				
Event / Webinar name	**Date**	**Location**	**Participants**	**Media hits**
CMC Heat Pump Class	2/12/2023	GWS Campus		
Partners in Energy - Residential workshop	3/3/2023	Third Street Center	14	-

Earth Day tabling in New Castle	4/22/2023	New Castle	75	-
Electrifying Fleets in Garfield County	4/27/2023	Holy Cross Energy HQ	17	1
Tabling at Dandelion Day	5/13/2023	Carbondale	100	-
Experience Electric Roadshow	6/4/2023	Glenwood Springs	40(questionaire responses), 90	6
Holy Cross Annual Meeting (booth)	6/15/2023	Basalt, TACAW	40	-
E-Bike Training	6/19/2023	Carbondale, TSC	17	1
E-Bike Training	6/21/2023	Glenwood Springs, Community Center	8	-
E-Bike Training	6/26/2023	Rifle, GarCo Public Health	10	-
E-Bike Training	6/27/2023	Parachute, Library	5	-
E-Bike Training	7/11/2023	Carbondale, TSC	1	-
Partners in Energy - EV Readiness Plan Workshop #1	7/13/2023	Morgridge Commons, Glenwood Springs	24	1
Silt Heydays Table	8/18/23	Veteran's Park in Silt	50	-
Partners in Energy - EV Readiness Plan - Fleets and Public Transit Focus Group	9/6/2023	Virtual Workshop	14	-
Partners in Energy - EV Readiness Plan - Codes and Policy Support Focus Group	9/6/2023	Virtual Workshop	6	-
Partners in Energy - EV Readiness Plan - EV Charging Infrastructure Focus Group	9/8/2023	Virtual Workshop	12	-
Partners in Energy - EV Readiness Plan - Equitable EV Access Focus Group	9/8/2023	Virtual Workshop	6	-
Building official's onsite code training	9/14/2023	Rifle Library	30	-
Three Rivers Clean Mobility Summit & Expo	9/21/2023	Glenwood Springs Community Center	79	3
Fall Residential Energy Savings Workshop	10/4/23	Morgridge Commons	8	4
Fall Residential Energy Savings	10/12/23	Rifle Library	6	4

Workshop				
EV Presentation	11/3/2023	Bridges High School	38	-
Buildings Presentation	11/3/2023	Bridges High School	38	-
Partners in Energy - EV Readiness Plan Workshop #2	11/14/2023	Virtual Workshop	18	-
Energy Efficiency Presentation	11/29/23	Glenwood Springs Middle School	25	-
HVAC training for contractors	11/29/23		31	-
Total Participants			**922**	

Media Stories

10/2/2023 Radio La Tricolor (Facebook video)
Autos eléctricos ¿Convienen?
https://www.facebook.com/radioaspen/videos/9959731257435293/

10/3/2023 Alpine e-Line
Get Your Home Ready for Winter
n/a

10/5/2023 Aspen Public Radio
On today's newscast: CLEER and Garfield Clean Energy are offering free workshops to get homes ready for winter
https://www.aspenpublicradio.org/2023-10-05/thursday-october-5

10/5/2023 Sopris Sun
New Garfield Clean Energy campaign highlights home energy audits, coaching
https://soprissun.com/carbondale-launches-home-energy-score-pilot-program/

10/5/2023 Holy Cross Energy newsletter
Get ready for winter with a home energy audit
n/a

10/6/2023 Glenwood Springs Post Independent
Home winter readiness workshop comes to Garco libraries
https://www.postindependent.com/news/home-winter-readiness-workshops-comes-to-garfield-county-libraries/

10/10/2023 Alpine e-Line
Get Your Home Ready for Winter
n/a

10/11/2023 Glenwood Springs Post Independent

Top tips for saving energy – and money – this winter
https://www.postindependent.com/opinion/top-tips-for-saving-energy-and-money-this-winter/
10/25/2023 Sopris Sun
Carbondale geothermal project wins Dept. of Energy grant
https://soprissun.com/carbondale-geothermal-project-wins-dept-of-energy-grant/

10/26/2023 Aspen Public Radio
As communities face climate change, CORE and CLEER help them transition to clean energy
https://www.aspenpublicradio.org/environment/2023-10-26/as-communities-face-climate-change-core-and-cleer-help-them-transition-to-clean-energy

10/30/2023 Think Geoenergy
Geothermal heating and cooling system to be built in Carbondale, Colorado
https://www.thinkgeoenergy.com/geothermal-heating-and-cooling-system-to-be-built-in-carbondale-colorado/

10/31/2023 World Energy
Geothermal Heating and Cooling System to Be Built in Carbondale, Colorado https://www.world-energy.org/article/37680.html

11/3/2023 Aspen Public Radio
On today's newscast: a group of buildings and homes in Carbondale could soon be heated and cooled by geothermal energy https://www.aspenpublicradio.org/2023-11-03/friday-november-3

11/7/2023 Glenwood Springs Post Independent
And just like that, electric vehicles are looking affordable
https://www.postindependent.com/opinion/and-just-like-that-electric-vehicles-are-looking-affordable/

11/28/2023 Sopris Sun
Libraries Report: A quick look at GCPLD's 2024 draft budget
https://soprissun.com/libraries-report-a-quick-look-at-gcplds-2024-draft-budget/