

9-27 version with comments and input from 3rd Workshop

Garfield Energy Action Plan

Vision:

Garfield Clean Energy Collaborative (GCE) will be an innovative leader in advancing energy efficiency, renewable energy, and clean transportation to protect the environment and build a strong, resilient and diverse economy.

Mission:

The mission of the Garfield Clean Energy Collaborative is to provide energy efficiency solutions, alternative and renewable energy opportunities, advance clean transportation options, and energy education to individuals and organizations, in order to protect the environment and build a stronger, more resilient economy benefiting the residents of Garfield County.

Goal 1: Energy Savings in the Built Environment

Achieve energy efficiency and conservation savings resulting in at least 12% total energy savings by 2030 over a 2019 baseline, which will require an average of at least a 1.5% total annual energy use reduction from 2023 through 2030. As technology and funding improves, work towards increasing total savings.

Energy efficiency and conservation is a central component of creating energy cost savings for residents, businesses and public institutions and triggers multiple economic benefits and opportunities.

Focus Area 1: Residential Sector (responsible for about 50% of 2019 built environment energy use)

Strategies:

- 1.1 Expand, continue, and advance robust, sustained residential energy efficiency programs for homes, with ample funding for rebates, grants, financing, and training to help Garfield residents maximize energy cost savings and grow economic opportunities.
 - Achieve a total of 3,000 participants in residential energy efficiency programs; increase the number of participants by 25% per year by 2030.
 - Or, achieve over 30,000 MMBtu annual reduction in residential energy use through energy efficiency program participation and other conservation efforts.
 - Increase access to energy savings for all households, with particular emphasis on low to moderate income households, and translation services for rebates and programs, to reduce the energy burden on Garfield County residents.

- 1.2 Provide ongoing support, education, and technical assistance to advance best practice energy-saving design for new construction; update codes and implement advanced energy/green codes where possible.
- 1.3 Advance incentives, programs and policies that encourage and support property owners to implement efficiency improvements before or after purchase.

Focus Area 2: Commercial/Agricultural/Industrial Sector (responsible for about 50% of 2019 built environment energy use)

Strategies:

- 1.4 Expand, continue, and advance robust commercial energy efficiency and energy management programs for businesses, with ample funding for rebates, grants, financing, and training to help Garfield businesses maximize energy cost savings.
 - Achieve a total of 300 participants in commercial energy efficiency programs by 2030; increase the number of participants by approximately 15% per year.
 - Or, achieve over 30,000 MMBtu annual reduction in commercial energy use through energy efficiency program participation and other conservation efforts.
 - Maximize access to any state or federal resources to help the Garfield region achieve goals.
- 1.5 Work with state partners, state and federal resources and utilities to create and offer incentives, technical assistance and training to create energy savings and increase energy efficiency for energy intensive industries in the county.
- 1.6 Expand and advance access to utility bill tracking and advanced energy management programs for large buildings.
- 1.7 Provide ongoing support, training and technical assistance to encourage best practice energy-saving design; secure funding to incentivize upfront energy-saving construction and design.
- 1.8 Work with state partners to expand access to incentives, funding, technical assistance and training to increase energy savings within Agricultural operations.

Focus Area 3: Public Institutions

Strategies:

- 1.9 Expand and continue countywide energy tracking and advanced energy management programs for public facilities.
 - Achieve at least 10% energy cost savings in GCE partner facilities by 2030 through energy tracking and data-driven advanced energy management.

- 1.10 Create and tap innovative funding sources for government entities to cover upfront costs of facility improvements to reach local adopted targets; encourage government entities to incorporate energy savings into decision making, planning and budgeting.
 - Maximize access to any state or federal resources to help public institutions in Garfield County achieve goals.
- 1.11 Provide ongoing support, training and technical assistance to encourage best practice energy-saving design for new construction.

Goal 2: Carbon-Free Electricity

Garfield County electricity will be 100% carbon-free by 2030 through grid-supplied resources and local renewable installations, as a means to a stronger, more resilient, and energy-secure economy and region.

Please note: This goal acknowledges questions and concerns raised about the “100% carbon-free” terminology during the planning process and over time will continue to seek to address these questions and concerns. Due to Xcel Energy and many other utilities using the term “100% carbon-free electricity” in their utility planning processes and sustainability goals, the plan is using this terminology while working to get a better understanding of whether there are more accurate terms to describe this goal. Please see the [Carbon Reduction Plan | Xcel Energy](#) which envisions a future powered by renewable and zero-carbon 24/7 energy technologies.

Focus Area 1: On-site Solar

Strategies:

- 2.1 Expand / continue Solarize Garfield County including support for an energy storage component, with ample funding and with special consideration for equitable access to the program.
- 2.2 Provide support and funding sources for all public entities to maximize on-site renewable energy for greater resilience and cost savings.
- 2.3 Work with all businesses in the region that are part of national corporations with net-zero and sustainability goals, to encourage local implementation of on-site renewable energy.
- 2.4 Work on the electricity grid, wholesale suppliers and infrastructure issues to address barriers to expanded renewable energy.

Focus Area 2: Community-scale Solar

Strategies:

- 2.5 Support efforts to install more community-scale renewable generation and storage, using the 3-County Solar+Storage plan as a guide.
- 2.6 Work on electricity grid and infrastructure issues to address barriers to expanded renewable energy.
- 2.7 Create and utilize innovative financing sources to maximize the local value of solar.

Focus Area 3: Carbon-free Grid

Strategies:

- 2.8 Promote enrollment to utility based renewable programs that increase access to carbon-free energy offered by the utilities.
- 2.9 Promote participation in community solar gardens and make community solar gardens more accessible.
- 2.10 Work with utilities to eliminate financial barriers for low-income and underserved communities in accessing carbon-free energy programs.
 - Increase translation services for these opportunities, thus reducing language barriers to participation.

Focus Area 4: Other locally-based renewable energy sources

Strategies:

- 2.11 Continue to increase regional awareness, exploration, development and implementation of other renewable energy sources including micro-hydro and geothermal.
- 2.12 Tap state and federal resources to accelerate use of geothermal energy and increase use of renewable energy for heating and cooling.

Goal 3: Clean Mobility

Transition at least 15% of all registered vehicles to zero-emissions electric by 2030; support alternative fuels where electric is not yet feasible or where alternative fuels are desirable; and help increase modeshare for biking, walking and transit.

Focus Area 1: Transportation electrification

Strategies:

- 3.1 Provide access to incentives, funding, and information that will make it easier for people to purchase Electric Vehicles (EV), which include BEV (battery-electric vehicles) and

PHEV (plug-in hybrid electric vehicles). Remove barriers to purchase and ensure equitable access to electric vehicles.

- 3.2 Provide technical assistance, access to incentives, information and support to encourage conversion of fleets to electric or plug-in hybrids.
 - Provide coaching and technical assistance to educate school districts on the details of, and how to apply for, the available funding from federal and state sources to transition school bus fleets to electric school buses.
 - Provide coaching and technical assistance to all fleet owners to encourage use of available incentives.
- 3.3 Continue to improve access to, improve, and maintain electric vehicle charging infrastructure.
 - Create a more detailed plan for expanding electric vehicle charging infrastructure in the region to be prepared for state and federal funding. Address charging infrastructure gaps, such as in multi family residences, to ensure all residents have access to EV charging infrastructure at home.
 - Provide targeted coaching and technical assistance to multifamily housing property managers and owners.
 - Connect residents, businesses, and municipalities to available incentives and programs for charging infrastructure.
- 3.4 Support efforts to electrify the public transit fleet.
- 3.5 Provide assistance to local governments related to the adoption of codes and policies that support EV adoption and multimodal transportation.

Focus Area 2: Increase biking, walking, transit mode share

Strategies:

- 3.6 Support local policies and conduct programs that encourage biking, walking and transit such as regional Bike to Work promotions and School biking/ walking programs.
- 3.7 Support community bike programs and increase access to bikes for all populations.
- 3.8 Increase access to electric bike rebates where biking can be used to replace vehicle trips.
- 3.9 Support opportunities to improve first-and last-mile connectivity:
 - Support and promote Community Based Transit and App-based on-demand ride share.
- 3.10 Support local policies and programs that encourage alternative transportation.
 - Provide assistance to local governments related to the adoption of codes and policies that support EV adoption and multimodal transportation.

- Support access to smart design to make it easier for biking and walking.

Goal 4: Greenhouse Gas Emissions

Note: The Garfield Partners In Energy Planning citizen team recommended that the 2022 update include a Greenhouse Gas Reduction Goal, acknowledging that all energy savings, renewable energy and clean mobility goals have a co-benefit of reducing carbon. However, there are additional strategies that reduce carbon emissions that are not specifically included in the three areas (efficiency, renewables, and transportation); these additional strategies are listed in this section.

The Garfield County region will reduce greenhouse gas emissions related to energy supply by 30% by 2030.

- Reduce greenhouse gas emissions related to the electric supply by 100% by 2030.
- Reduce greenhouse gas emissions related to natural gas usage as well as related to utilities' commitment to cleaner delivery and supply by 10% by 2030.

Focus Area: Building Electrification

Strategies:

- 4.1 Create, fund and promote a countywide building electrification program.
- 4.2 Provide technical support for community institutions and developers to implement new construction efficiency and building electrification technologies.
 - Provide new construction design assistance to support the integration of efficiency measures and renewable generation from the start.
 - Promote and increase participation in new construction efficiency and electrification incentives.
 - Work with community institutions to lead by example.
 - E.g., opportunities to engage with Rifle Eco-Dwellings development.
- 4.3 Provide support to local government staff and elected officials around energy code updates relating to beneficial electrification.
 - Implementation and enforcement of electrification codes and energy efficiency, renewable energy ready, EV-ready etc.
 - Align local building codes with 2022 Statewide legislation.
- 4.4 Provide education and outreach to residents, businesses and beneficial electrification opportunities.
 - Build comfort with new technologies.
 - Raise awareness of existing incentives and programs.

- Bulk purchase program for heat pumps

Goal 5: Clean Energy Economic Development and Jobs

Accelerate and harness the economic benefits of energy efficiency, clean energy, and clean mobility for the benefit of the residents and communities of Garfield County, and find ways to address any economic impacts of transitioning to clean energy.

Focus area 1: Mobilizing funding, incentives and investment

Strategies:

- 5.1 Develop and offer multiple funding and financing options to overcome any upfront cost barriers associated with the above strategies and to ensure equitable access to new technologies, clean energy and energy savings. Work to tap any state, federal or other resources to catalyze innovation and implement the vision, mission and goals of this plan.
- 5.2 Identify and secure sustained funding sources for strategies to avoid “boom-bust” approaches to program implementation and achieve sustained benefits for growing the clean energy economy.

Focus area 2: Education, training, capacity building

Strategies:

- 5.3 Develop and promote workforce development programs that support all the above strategies to increase localized employment opportunities and business development.
 - Identify gap areas and work with state and other partners to create training and incentives to fill gaps.
- 5.4 Work with educational institutions to provide energy education opportunities and training for multiple age groups. Work with educational institutions to create paid internships.
- 5.5 Provide ongoing outreach and training to build countywide knowledge, capacity, energy literacy, leadership, and technical expertise to support maximum local and regional economic benefits associated with achieving goals.

Focus area 3: Policy and innovation

Strategies:

- 5.6 Pursue policies and funding that address the fiscal impacts of transitioning to a clean energy economy and assisting the region with maintaining a strong economy and resources for public services in the face of changing national energy conditions.
- 5.7 Pursue partnerships and innovation to create maximum opportunities from implementation of strategies and harness benefits locally.