Posted:	



Town of New Castle 450 W. Main Street PO Box 90 New Castle, CO 81647 **Administration Department Phone:** (970) 984-2311 **Fax:** (970) 984-2716
www.newcastlecolorado.org

Agenda

New Castle Climate and Environment Commission Work Session Thursday, March 17, 2022, 3:30 PM

Due to concerns related to COVID-19, this meeting will be open to the public as a virtual meeting only.

To join by computer, smart phone or tablet click HERE

If you prefer to telephone in: Please call: 1-346-248-7799 Meeting ID: 709 658 8400

Follow the prompts as directed. Be sure to set your phone to mute until called on.

- A. Presentation: Clean Energy Economy for the Region (CLEER) Maisa Metcalf and Erica Sparhawk
- **B.** Update: Earth Day Activities
- C. Consider Items for the April Meeting

Garfield Clean Energy





















DOLA Renewable Energy Planning Grant











Three County Solar and Storage Study

- 1. How much electricity does our region use?
- How much of the electricity consumption can be met by regional solar development?
- 1. What role will battery storage play?
- 1. What benefits would regional Solar +Storage development bring to the region and economy?
- 1. What barriers stand in the way?
- 1. What actions can we take to fully realise the potential and benefits to the region?

Regional Energy Inventory

How much electricity does our region use?

In 2019, buildings and industry in Garfield, Pitkin and Eagle counties used 1.86 million MWH of electricity at a cost of \$186.5 million

How much electricity is currently produced by regional solar generation?

- Net metered solar- 24 MW
- Community Scale Solar systems 8 MW

What is the regional solar development potential?

UTILITY-SCALE, COMMUNITY-SCALE & NET-METERED SOLAR



Utility-scale solar is typically 15 megawatts (MW) or more in size, covering 75 ur more acres and connected directly to regional transmission lines.

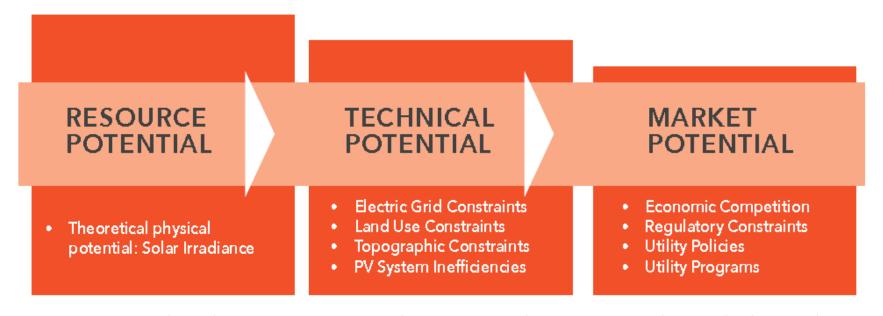


Community-scale solar (CSS) is typically 1 MW to 15 MW in size, built on parcels of 5 to 75 acres, and connected to the distribution grid.



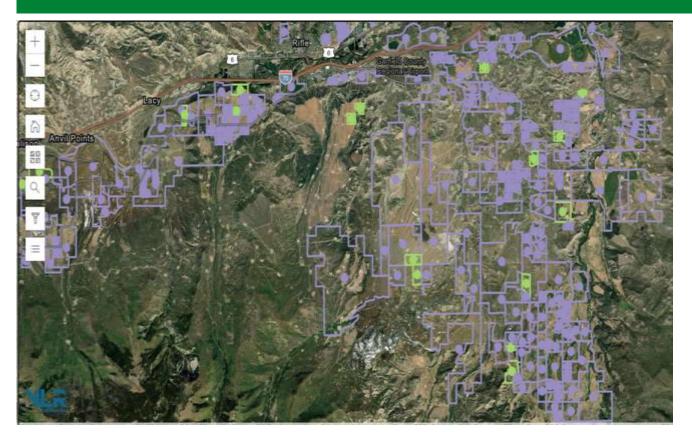
Net-metered (NM) solar, which can be on roofups or ground-mounted nearby, is much smaller and usually sized to offset about 100% of the customer's annual energy use. Systems are connected "behind the meter," where they directly offset a customer's electricity usage.

Regional Potential of Community Scale Solar + Storage



ADAPTED FROM: National Renewable Energy Laboratory, "Estimating Renewable Energy Economic Potential in the United States: Methodology and Initial Results," Brown et al., 2016, p.8.

Solar Site Map



Identified 722 feasible parcels

Technical potential of 431 MW

Market Potential of 232 MW

- 23% of total consumption

Regional and Economic Benefits

Economic Benefits	Market Potential after 20 years		
Local capture from project implementation	\$ 73.14 million		
Local capture from project operation	\$37.5 million		
Property tax revenue	\$26.5 million		
Land lease revenue	\$31.3 million		
Energy savings	\$ 19 million/year		
Jobs	260 per year		

Additional benefits:

- Reduced GHG emissions
- Reduced demand costs for utilities
- Deferred infrastructure upgrades
- Value of resilience
- Economic diversification

Barriers to expanding RE for 100% Clean Energy Supply

- Balancing supply and demand on the grid
 - Expand demand management
 - Expand storage
- Regulatory issues at state and federal levels
- Lack of joint planning on transmission and lack of access
- Lack of investment in grid infrastructure
- Need more low cost financing/funding sources

Action Plan

Divided into 8 major categories 35 suggested actions for a diverse group of stakeholders:

- Local governments
- Utilities companies
- State and federal agencies
- Educational institutions
- Economic development orgs
- Energy partnerships
- Regional collaboratives

Policy and regulatory:

Create supportive tax and incentive policies, regulatory improvements

Capacity building:

Education, training, workforce development

Best practises

Land use and solar development

Equity

wealth

Ensuring fair and equal access to benefits of development

Funding and Financing

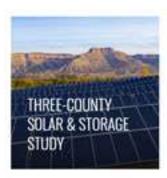
Create low cost funding pool, build regional

Tool Box of Resources: http://wccleanenergy.org/landowner-resources/





- Solar land use permitting, codes and development considerations
- Solar procurement for local governments
- Planning tools
- Is your property suitable for solar development?
- What might your property be worth?
- The development process
- Co-existing with solar development





Streamline Solar Permitting

Achieved SolSmart Designation:

- Garfield County Solsmart Gold
- Town of Silt SolSmart Gold
- Town of Carbondale SolSmart Silver

Close to completing designation:City of Glenwood SpringsTown of Parachute

- Town of Snowmass Village

Initiated SolSmart Process:

- Eagle County
- Town of Eagle
- Town of Vail

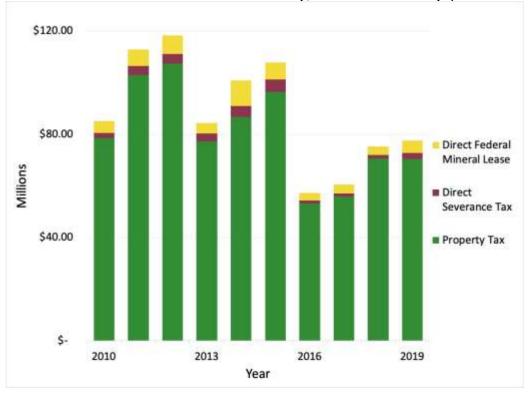
Streamlined permitting outside of Solsmart:

Town of Gypsum



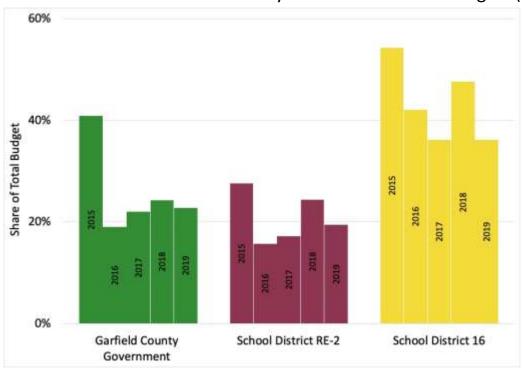
Economic Transition Assessment

All Public Revenue from the Oil and Gas Industry, Garfield County (2009-2019)



Economic Transition Assessment

Contribution of Oil and Gas Revenue to Garfield County and School District Budgets (2015-2019)



Garfield Clean Energy 2022



- Exciting program for low to moderate income families
- Rebates for efficiency measures at homes
- Outreach to senior and homes with propane heating
- In person events in each Garfield County Library branch
- Partnership with existing programs: WAP and CARE
- Tenants can participate in





ReEnergize Garfield County

	Maximum income to qualify for a household of:					
Income Level:	1 person	2 people	3 people	4 people	5 people	Qualifies for:
Level 1: 60% State Median Income	\$33,108	\$43,296	\$53,484	\$63,672	\$73,860	WAP, CARE, and ReEnergize (unrestricted)
<u>Level 2:</u> 80% Area Median Income	\$49,520	\$56,560	\$63,600	\$70,640	\$76,320	CARE, and ReEnergize (unrestricted)
<u>Level 3:</u> 100% Area Median Income	\$61,900	\$70,700	\$79,500	\$88,300	\$95,400	ReEnergize (\$5,000 max)
<u>Level 4:</u> 120% Area Median Income	\$74,280	\$84,840	\$95,400	\$105,960	\$114,480	ReEnergize (\$3,000 max)

How to apply for ReEnergize?



High energy bills? Start here.



Contact CLEER at 970-704-9200;

Enroll online: garfieldcleanenergy.org/reenergize.