

City of Golden Community Solar Garden Evaluation Site #1: 56th Avenue

Site:

20900 West 56th Avenue, Golden, CO 80403
Jefferson County PIN: 300195864.
Roughly 40 acres of an 80-acre parcel owned by the Colorado State Land Board and leased by the City of Golden.

Potential capacity:

13 megawatts or more in future phases
(21,700 solar panels, 85 inverters)

Potential progress toward the City's sustainability goals:

+9% toward 100% renewable energy target
Producing equivalent energy for about 1,800 homes.

Who can subscribe?

- ✓ Low-income households
- ✓ Renters
- ✓ Homeowners
- ✓ Business owners & tenants
- ✓ Commercial building owners
- ✓ Multi-family owners
- ✓ Municipal government

The City leases 80 acres off of West 56th Avenue from the State Land Board. The current lease is a “planning” lease, which allows for the study of whether a CSG is feasible on the property and requires a nominal annual fee. If at a future time, the City wanted to pursue development and construction of a CSG, the State would consider a “production” lease which allows for a longer term (likely at least 20 years) and lease fees would be based on the value of the energy produced.

Capacity. The Colorado School of Mines study completed in 2021 indicated a potential capacity of nearly 13 MW for development in the north half of the site with a potential generation of 19.5GWh, annually. With consideration of limitations for both existing energy grid infrastructure and regulations, a better estimate of the site's current capacity is 10MW. This capacity is not limited by the space available on the property, but rather by grid infrastructure upgrades needed in the region to accommodate the additional generation. General estimates for the upgrades are in the ballpark of \$30k/MW after existing capacity has been met (about 10MW).



State Land Board parcel off West 56th Avenue. This proposed site plan was identified in the 2021 CSM study. Initial development would likely be limited to the areas identified in Phase and 2.

Opportunity: In Q4 2022, Xcel Energy is expected to release its next RFP for Community Solar Gardens. Xcel will evaluate proposals and decide to award projects toward the end of the year, for construction in 2023. Submittals do not require the design of a project to be complete but do require a level of engineering and experience that is typically provided by a community solar garden developer. If Golden is to direct an application and submittal, a partnership with a third-party developer is needed.

Cost/Benefit Analysis: To be determined, upon selection of a qualified community solar garden developer and project design.

Next Steps:

