

COMMUNITY SOLAR GARDEN SUBSCRIBER QUESTIONS



This document begins by briefly introducing Community Solar Gardens and what you should know as a potential subscriber.

It then continues with questions that you can ask operators as you move forward.



Q What are Community Solar Gardens?

Community Solar Gardens (also called Community Solar and Community-Shared Solar) are centrally-located solar photovoltaic (PV) systems that produce electricity for participating subscribers. They are a way for people in Minnesota to benefit from solar PV systems without installing their own stand-alone project. Programs vary by utility in Minnesota. Many cooperative utility customers can subscribe to a project owned by their local utility. Customers served by Xcel Energy can participate in projects offered by private Community Solar Garden Operators.

Q What's the point of this document?

To help prospective subscribers decide which project might be right, CERTs, Minnesota Department of Commerce, Minnesota Solar Energy Industry Association, and Minnesota Renewable Energy Society have developed a document outlining what any Subscriber Agreement should address and highlighting the questions that can be asked up front to ensure a clear understanding of the subscription and its terms.

Q What should you know before subscribing?

Before subscribing to any particular project, all subscribers should ask for and review the operator's subscriber agreement. All subscriber agreements should address elements included in the Community Solar Garden Subscriber Disclosure Checklist (see link at left). Additional questions that subscribers can ask are on the pages to come.

GET THE CHECKLIST



See what Community Solar Subscriber Agreements should include by downloading our subscriber checklist at MnCERTs.org/CSG-Disclosure

Next pages: Important subscriber questions & info

Q Company & Project Details

- How long have you been in business? How many installations have you done? Do you have references I can contact?
- Will I be able to visit the system? How can I show I'm participating?
- Will I be able to see online how much my subscription is producing for the life of my subscription agreement?
- How will I receive updates about the project? How will I be notified if something goes wrong?
- Who handles my subscription over time? Who do I call if I have questions?
- When do I need to sign a subscriber agreement? What kind of paperwork will I need to fill out?
- What types of PV modules will be used in the project? How do they differ from other panels on the market, and why did you choose them?
- What will you do to ensure that the panels won't become shaded by another structure in the future?

Q Pricing & Compensation

Subscribers will be compensated for their share of the Community Solar Garden system's output via a credit on their utility bill. The credit will be made on a dollar per kilowatt hour produced (\$/kWh) basis for most utilities.

Subscribers in Xcel Energy's service territory will be compensated at the Applicable Retail Rate (ARR) for the duration of their subscription, which may last up to 25 years. The ARR is calculated by Xcel Energy by dividing the previous year's revenues by sales for each customer class; the ARR will be updated every year. Subscribers should verify their service class (i.e., residential service, small general service, or general service*) prior to subscribing. The current ARR's plus renewable energy credit (REC) payments by Community Solar Garden size are listed below.

Most operators make assumptions that the ARR will change over time when they estimate a subscriber's potential return on investment. The retail rate trends over the past 20 to 25 years are a good rule of thumb to ground truth these numbers. An assessment by Xcel Energy indicates that the ARR's across all customer classes have increased an average of 2.6 to 2.9 percent per year since 1992.

2014 Xcel Energy Applicable Retail Rates + REC Payments (\$/kWh)

REC Payment	Residential Service	Small General Service	General Service
None (Applicable Retail Rate)	0.12033	0.11783	0.09456
\$0.02 (> 250 kW gardens)	0.14033	0.13783	0.11456
\$0.03 (≤ 250 kW gardens)	0.15033	0.14783	0.12456

The Minnesota Public Utilities Commission has jurisdiction over Community Solar Garden rates for Xcel Energy and other investor-owned utilities. The Commission may change the community solar garden subscription rates for future projects, but community solar gardens forming under the current ARR structure will receive the ARR's in place at the time the solar energy is generated for the life of the community solar garden.

RECs stands for Renewable Energy Credits, which represent the renewable attributes of solar and other renewable energy generation. Operators in Xcel Energy's Community Solar Garden program may elect to sell the RECs to the utility. In the case of Xcel Energy customers, the compensation will be paid directly to the subscriber based on the size of the garden as described in the table above. If the RECs are sold, subscribers cannot market themselves as "solar powered," as the green attributes for subscription are assigned to the owner of the RECs. This is consistent with Green-E best practices to avoid double counting (see link in More Resources section).

* The General Service customer class is also referred to as the Demand-Metered customer class.

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Subscription Terms

To participate in a project, a potential subscriber must purchase a subscription. There are two primary subscription models: **pay upfront** and **pay-as-you-go**. In a pay upfront model a subscriber purchases a subscription for a onetime fee that covers the life of the agreement. The subscriber reaps the subscription benefits (utility bill credits for energy produced) for the length of their subscription. In a pay-as-you-go model a subscriber pays in installments, which are often based on the Community Solar Garden's production attributed to their subscription. Whichever route you choose, you will not actually own solar panels, you will own a subscription for the solar energy system's production. Xcel Energy customers can subscribe to as little as 200 watts of solar capacity or up to 120% of their average annual energy use.

Subscription Size and Price Questions

- To participate, do I pay an upfront subscription fee, a monthly subscription fee, or a combination thereof?
- What is the subscription price? Is it an up-front price or a monthly charge? Is the subscription price all inclusive, or are there additional administrative or maintenance fees that may be charged?
- Approximately how much energy will the system produce, and what portion of my energy use might I expect my subscription to offset annually? Based on your subscription rates, what would it cost me to cover all of my electricity use?
- What happens if my subscription's energy production exceeds my energy bill during the year? What happens if it exceeds 120% of my energy use? Who benefits from my subscription's excess production?

Additional Subscription Terms Questions

- What is the term of my subscription (i.e., how long does it last; under what conditions is there an exit penalty)?
- What happens if I move, want to cancel, or die? How will my shares be transferred? Is it my responsibility to sell it to someone else?
- How much will I be paid for my subscription at the time of transfer or cancellation?
- What are the tax implications of my subscription?
- What happens to my subscription if the operator goes out of business or sells the garden?
- Describe the production and maintenance warranties included in the subscription agreement.
- What happens if the operator is unable to maintain and operate the garden? What are my remedies as a subscriber?
- What happens if the garden is perpetually under-producing? What are my remedies as a subscriber?

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Looking for More Resources?

Learn more from CERTs in our **Guide to Community Solar Gardens**, which includes a list of developers and operators, program updates, and frequently asked questions at MnCERTs.org/SolarGardens.

- **Green-E:** green-e.org/getcert_re_stan.shtml
- **Questions for Hiring a Contractor by Minnesota Department of Commerce:** mn.gov/commerce/energy/images/Hiring-Renewable-Energy-Installer.pdf
- **Michigan Community Solar Gardens Guidebook by Great Lakes Renewable Energy Association:** michigan.gov/documents/mdcd/Michigan_Community_Solar_Guidebook_437888_7.pdf
- **Community Solar Garden Guide by NREL:** nrel.gov/docs/fy11osti/49930.pdf