

Fact Sheet for Community Solar PPA Model

What it is: A community solar garden is a large solar array located on a parcel land. Individual businesses, non-profit entities, and public organizations can purchase electricity from a select number of panels to offset a portion of or all of their electricity consumption. Since the solar garden is owned, operated, and maintained by the solar developer and is located on local land, it provides an alternative to direct-owned rooftop solar energy arrangements.

Who can participate: It is available to all commercial, government, and non-profit entities that are located within Xcel Energy's territory and that are located within Garfield County or within a county that is adjacent to Garfield County.

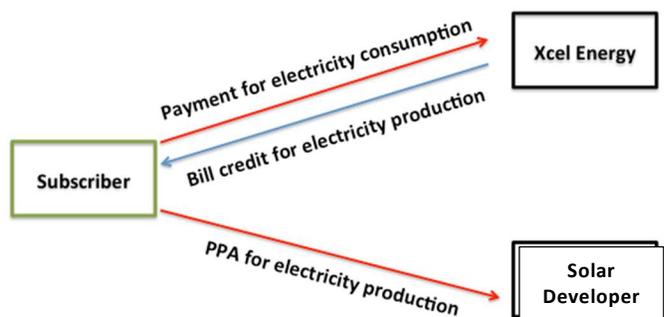
How it works: Community solar gardens are offered to interested entities through Xcel Energy's Solar*Rewards Community program. To participate, an entity signs a contract with the solar developer for 20 years to receive solar energy from a community solar array. Once signed up, participants become "subscribers". The solar developer assigns a select number of panels to the subscriber that will generate solar energy to offset a percentage (up to 120%) of the subscriber's electricity consumption at selected locations. The subscriber receives a utility incentive, as a bill credit (also referred to as Solar*Rewards Community [SRC] credit) from Xcel Energy that reflects the amount of solar energy produced at the solar garden. The solar developer will own, operate, and maintain the system; manage and maintain equipment warranties; and update equipment as required.

Flow of money: Subscribers will make two payments:

- The subscriber will continue to pay their monthly utility bill to Xcel Energy for total electricity consumed (under current electricity rates).
- The subscriber will make a new payment to the solar developer for solar electricity produced. The payment to the solar developer is a locked-in monthly rate called the Power Purchase Agreement (PPA) payment and is paid one month in arrears. This rate will be charged as a \$ per kilowatt-hour (kWh) and reflects the amount of electricity generated by the panels attributed to the subscriber. Generally, the PPA payment will escalate at a fixed rate each year for the 20-year contract period. This model requires no upfront payment or financing.

The subscriber will receive one payment:

- Xcel Energy will issue a bill credit on the subscriber's monthly utility bill based on the amount of electricity generated by the solar panels. The bill credit will depend on the subscriber's rate class and each bill credit will be recalculated by Xcel Energy annually. If multiple subscriber locations have different rate classes then a separate fixed bill credit will be issued as \$ per kWh for each rate class. Excess credits will roll over year after year.¹



The subscriber will realize cost savings only when the bill credits exceed the sum of the payments to Xcel Energy and to CEC.

Benefits: The most significant benefits include:

- Potential to save money immediately.

¹ Xcel customers are not allowed to have a negative utility bill; therefore, when an entity's bill credits exceed their payment to Xcel Energy, the excess credits roll over to future billing. Excess credits do not expire.

- Potential to keep money within the region.
- No upfront payment or financing.
- Reduce or hedge long term energy costs with a 20-year agreement that rises and falls with utility costs.
- Potential marketing benefits to the subscriber for being a leader in sustainability within the community and among peers.
- Participating as an early adopter of a progressive and innovative solution to furthering the production of renewable energy.
- Improving public health and the environment.
- Optimizing production through established operation and maintenance procedures and comprehensive equipment warranties.
- Reducing internal management time by avoiding solar panel operation and maintenance and solar panel land management.

Risks: Key risks may include:

- Cost savings will vary. Several factors used to determine cost savings vary annually including bill credits, monthly solar electricity production, and monthly electricity consumption.
- There is no guarantee that the bill credit rate calculation methodology used by Xcel Energy will remain constant through the 20-year contract period, nor is there any guarantee that the bill credit rate will remain in effect for the 20-year contract period.^{2,3}
- Currently the bill credit rate calculation methodology used by Xcel Energy states that the bill credit rate will increase by the same amount as electricity costs. However, no one can predict future electricity rate increases. Since the increase in electricity rates determines the increase in bill credit rates and the bill credit rate effects the savings from solar, there is the risk that savings will be less than expected if the utility rate escalates at a very low rate. In the worst-case scenario utility rates could escalate at a very low rate, or cease to escalate. This would cause the bill credit rate to also increase at a very low rate, and the ability to generate savings would decrease. Yet, the subscriber would still be liable to pay the solar developer the PPA payment which escalates annually at a locked-in rate.
- The bill credits may not always exceed the payment to Xcel Energy and the PPA payment to the solar developer.

Recommendations: To insulate subscribers from fluctuating electricity costs and production amounts, it is recommended that subscribers consider the following:

- Choose a realistic and conservative utility escalation rate to set reasonable expectations for cost savings.
- Compare what the electricity costs to Xcel Energy would have been in the absence of solar to the electricity costs after the subscription to community solar to determine the potential for cost savings over the contract period.

² 2015 Colorado Solar*Rewards®Community® RFP Q/A Responses (updated July 9, 2015):

<http://www.xcelenergy.com/staticfiles/xe-responsive/Admin/Managed%20Documents%20&%20PDFs/CO-SRC-RFP-QA.pdf>

³ The likelihood that bill credits are significantly reduced or are eliminated is very low due to the popularity of community solar, Xcel Energy's use of community solar garden to meet the Renewable Portfolio Standard requirements, and the Public Utilities Commission's mission to protect rate payers, including community solar subscribers.