

Sustainability Commission Agenda

May 17, 2022 - 6:30 p.m.

City Council Chambers – Minnetonka Community Center

Members of the public who desire to monitor the meeting remotely or to give input or testimony during the meeting can find instructions at https://www.minnetonkamn.gov/government/virtual-meeting-information.

- 1. Call to Order
- 2. Roll Call
- 3. Approval of Agenda
- 4. Approval of Minutes: March 15, 2022
- 5. Report from Staff:
 - A. Energy Action Plan Update
 - B. Summer Farmer's Markets and SummerFest Sign Up
 - C. July Events
 - Solar Power Hour (presented by MREA and selected installer) Thursday, July 14th
 - Everything Electric Event Sunday, July 24th (Tentative Date)
 - D. Next sustainability commission meeting will be on July 19th
- 6. Report from Sustainability Commission Members
- 7. Agenda Items
 - A. Sustainable Minnetonka Awards Update
 - Recommendation: Provide promotion recommendations for the Sustainable Minnetonka Awards
 - Staff Member: Drew Ingvalson
 - B. Sustainable Commission Education Opportunities
 - Recommendation: Review staff's list of options, provide additional educational opportunities that they are interested in, and select their top two choices.
 - Staff Member: Drew Ingvalson

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C. Community Solar Garden Discussion

- Recommendation: Listen to the presentation and provide questions/comments regarding community solar gardens at the City of Minnetonka
- Staff Member: Drew Ingvalson
- Presenter: Julia Wells, GreenCorps Member serving the City of Minnetonka

8. Other Business

9. Adjournment

If you have questions about any of the agenda items, please contact:

- Drew Ingvalson, Associate Planner/Sustainability Coordinator (952) 939-8293, dingvalson@minnetonkamn.gov
- Loren Gordon, AICP, City Planner, (952) 939-8296, <u>lgordon@minnetonkamn.gov</u>
- Julie Wischnack, AICP, Community Development Director, (952) 939-8282, jwischnack@minnetonkamn.gov

Unapproved Minnetonka Sustainability Commission Virtual Meeting Minutes

March 15, 2022

1. Call to Order

Chair Golob called the meeting to order at 6:30 p.m.

2. Roll Call

Sustainability Commissioners Greta Beck, Elizabeth Boor, Brian Golob, Matt Henry, David Ingraham, and Ashley Pattain were present. Justin Anderson, Edwin Avalos and Harapanahalli Muralidhara were absent.

Staff present: Community Development Director Julie Wischnack and City Planner Loren Gordon.

Megan Wick and Marisa Bayer from the Center for Energy and the Environment and Minnesota Representative Patty Acomb were present.

3. Approval of the Agenda

Ingraham moved, second by Henry, to approve the agenda as submitted.

Beck, Boor, Henry, Ingraham, Pattain, and Golob voted yes. Anderson, Avalos and Muralidhara were absent. Motion carried.

4. Approval of Sustainability Commission Jan. 18, 2021 Meeting Minutes

Beck moved, second by Ingraham, to approve the minutes as submitted.

Beck, Boor, Henry, Ingraham, Pattain, and Golob voted yes. Anderson, Avalos and Muralidhara were absent. <u>Motion carried.</u>

5. Report from Staff

Gordon gave the staff report. He stated that:

- The next sustainability commission meeting is scheduled to be held in person on May 17, 2022.
- He welcomed new commissioner Elizabeth Boor. Boor introduced herself.
 She is a graduate student at the UMN Water Resources Masters of
 Science program focusing on researching septic waste and toxins
 traveling into soils and groundwater. She is also an intern at the Nine-Mile
 Creek Watershed District.

6. Report from Sustainability Commission Members

Chair Golob stated that the farmer's market at the community center was well attended. There was a steady flow of visitors to the sustainability table. Many LED bulbs were given out.

7. Agenda Items

A. Energy Action Plan Update

Gordon introduced Megan Wick and Marisa Bayer from the Center for Energy and the Environment.

Ms. Wick gave a presentation.

Henry asked if any steps have been decided on to help reduce the 20-year commitment required for an entity or individual to adopt a solar garden subscription since it may be preventing some from entering into the agreement. Ms. Wick explained that there would be three workshops. The first workshop will focus on strategies to make renewable energy affordable. The second and third workshops will focus on E.V.s and business outreach. The first workshop could look at reducing the required 20-year commitment and mark it as a priority for Minnetonka.

Henry suggested Minnetonka take some of the responsibility. Gordon stated that research, a capital improvement process, and an arrangement with a provider would need to be done before the implementation of an initiative. Staff will continue to look at all of the options.

Chair Golob asked if some of the previous energy-action-team members would be on the new committee or if all of the members would be new. Gordon stated that there might be some overlap, but it will be made up of mostly new members.

Chair Golob thanked Ms. Wick and Ms. Bayer for attending the meeting.

The public hearing was opened. There was no testimony, and the public hearing was closed.

Boor moved, second by Henry, to recommend that the city council approve the Minnetonka Energy Action Plan. Beck, Boor, Henry, Ingraham, Pattain, and Golob voted yes. Anderson, Avalos and Muralidhara were absent. Motion carried.

B. Reflections on the 2021 Glasgow UN Climate Change Conference

MN State House Representative Patty Acomb gave a presentation.

Representative Acomb stated that she loves how Minnetonka supports regional and national groups. Sharing knowledge and learning from others is powerful. Talking about

good and progressive initiatives gives other cities' staff and elected officials the idea to do the same. It is helpful to brag and share stories at League of M.N. conferences and work regionally with neighboring communities.

Beck asked what Representative Acomb has seen that could help break down partisan walls and encourage a focus on sustainable initiatives. Representative Acomb agreed that is key. In order to promote community solar energy in Minnetonka, Representative Acomb found that it is beneficial to show its multiple benefits. As well as decreasing the climate and environmental impact by reducing greenhouse-gas emissions, utilizing solar energy saves the city money, which, when made known, helped make it more of a priority for more people.

Boor asked how U.S. states that have different issues and climates were studied at the climate change conference. Representative Acomb explained that there were many presentations on the impact of climate change on different regions, including fire, water quality issues, and transportation. One presentation noted how China is the country with the most, and the U.S. is the country with the second-highest amount of greenhouse-gas emissions. The mid-west area of the U.S. has the sixth-highest amount of greenhouse-gas emissions in the world. That shows how important the issue is and how we need to be leaders to work to decrease the amount of emissions.

Henry asked what initiatives Representative Acomb has seen used to decrease the amount of salt in groundwater. Representative Acomb answered that there had been a group working at the capital on this issue for a long time. They walk around with teaspoons on a necklace to remind people that a teaspoon of salt will contaminate five gallons of water and that salt is very difficult to get out of water. It is understandable that a salt applicator would oversalt a parking lot to prevent being sued due to a slip-and-fall injury. There is a bill being presented in M.N. that would prevent a salt applicator from being able to be sued if they would attend a smart salt application training program.

Henry noted that Eden Prairie utilizes a centralized water-softener system for city water to decrease each home's use of salt to soften water. Representative Acomb agreed that might be the next step, but it would be very expensive and require a monumental change to a city's infrastructure.

Henry appreciated Representative Acomb's work. Representative Acomb noted that Minnetonka has been doing great work and is using best practices by using liquid brine on streets and parking lots to cut down on its use of sodium chloride.

Boor noted that the MN Pollution Control Agency has a template city ordinance that requires all salt applicators to get the MN PCA's smart salting training. That is something the sustainability commission could look at. Representative Acomb liked that idea.

Chair Golob asked how long the conference lasted. Representative Acomb answered that 40,000 people from around the world attended the conference. It was the largest conference to date. It lasted two weeks. An agreement was made with goals that include

phasing down the use of coal and slashing methane emissions by 45 percent by 2030. Minnesota has not been meeting its emission goals.

Representative Acomb thanked commissioners for serving on the sustainability commission. Chair Golob thanked her for the presentation and for attending the meeting.

C. Climate Emergency Declaration

Gordon reported. Staff recommends commissioners review the proposed resolution and make a recommendation to the city council.

Ingraham asked if the resolution wasn't on the under consideration, would the city be doing anything differently. In response to Ingraham's question, Gordon acknowledged that Minnetonka is already committed to taking action. Approving the climate action emergency plan is symbolic by joining with other communities to commit to the efforts in place.

Chair Golob supports the formal declaration and feels it is important for Minnetonka to set an example for others. Minnetonka may still act independently with its own initiatives.

Henry thanked the staff for their work and supported the proposal to highlight Minnetonka's resolve to the issue.

The public hearing was opened. No testimony was submitted, and the public hearing was closed.

Henry moved, second by Ingraham, to recommend that the city council adopt the resolution approving the Minnetonka Climate Action Emergency Plan. Beck, Boor, Henry, Ingraham, Pattain, and Golob voted yes. Anderson, Avalos and Muralidhara were absent. Motion carried.

This item is scheduled to be reviewed by the city council at its meeting on April 11, 2022.

D. Approval of Bylaws

Beck moved, second by Pattain, to approve the Minnetonka Sustainability Commission Bylaws as submitted. Beck, Boor, Henry, Ingraham, Pattain, and Golob voted yes. Anderson, Avalos and Muralidhara were absent. Motion carried.

E. Election of Commission Chair and Vice-Chair

<u>Ingraham moved, second by Beck, to elect Golob to serve as the Minnetonka</u>
<u>Sustainability Commission Chair for 2022.</u> Beck, Boor, Henry, Ingraham, Pattain, and Golob voted yes. Anderson, Avalos and Muralidhara were absent. Motion carried.

<u>Ingraham moved, second by Beck, to elect Pattain to serve as the Minnetonka</u>
<u>Sustainability Commission Vice-Chair for 2022.</u> Beck, Boor, Henry, Ingraham, Pattain, and Golob voted yes. Anderson, Avalos and Muralidhara were absent. <u>Motion carried.</u>

8. Other Business

Chair Golob thanked Henry for attending the meeting virtually from Belgium at 2:15 a.m.

9. Adjournment

unanimously.	
	

By:
Lois T. Mason
Planning Secretary



Sustainability Commission Agenda Item 7A Meeting of May 17, 2022

Title:	Fitle: Sustainability Minnetonka Awards Update			
Report From:	Drew Ingvalson, Planner			
Submitted through:	Julie Wischnack, AICP, Community Development Director Loren Gordon, AICP, City Planner			
Action Requested: Form of Action: Votes needed	☐Motion ☐Informational☐Resolution ☐Ordinance☐5 votes ☐N/A ☐ Oth	e ⊠Other □N/A		
Summary Statement	<u> </u>			
Tactic 7 of the city's Energy Action Plan outlines that the city should "recognize participants performing upgrades to their homes." In July 2022, the sustainability commission will be selecting Sustainable Minnetonka Award winners.				
Recommended Action	<u>on</u>			
	the staff's proposed promot the Sustainable Minnetonka	ion plan and additional promotion Awards.		
Strategic Profile Rel				
□Financial Strength & Operational Excellence □Safe & Healthy Community				
Sustainability & Natural Resources □ Livable & Well-Planned Development				
□Infrastructure & Ass	•	☐ Community Inclusiveness		
Statement: N/A	⊠ N/A			
<u>Background</u>				

In April 2022, the City of Minnetonka posted the Sustainable Minnetonka Awards application on the city webpage. That month, the city also advertised the awards in the Minnetonka Memo.

Unfortunately, as of May 11th, the city has only received one application for the new awards. Over the next month, the staff plans to promote the awards:

- With the local school's earth club advisors;
- With the Chamber of Commerce;
- On the city's social media accounts;
- With relevant city email subscriber groups; and
- At city hall, community center, and Williston Fitness Center.

Meeting of: May 17, 2022 Subject: Sustainability Minnetonka Awards Update	Page 2
To increase public awareness of the new awards, the staff encourages sustainability commission members to share this information with their social groups. Staff also requipments commission provide comments regarding staff's proposed outreach over the next radditional promotion recommendations.	ests that month and



Sustainability Commission Agenda Item 7B Meeting of May 17, 2022

itle: Sustainability Commission Education Opportunities			
Report From:	rt From: Drew Ingvalson, Planner		
Submitted through: Julie Wischnack, AICP, Community Development Director Loren Gordon, AICP, City Planner			
	esolution \square Ordina	3	
Summary Statement			
Staff is requesting the susta preferences for the next 12	•	n provide input on their education opportunities	
Recommended Action			
	•	ission review the staff's list of options, provide re interested in, and each commissioner select	
Strategic Profile Relatabil □ Financial Strength & Opera □ Sustainability & Natural Res □ Infrastructure & Asset Mana	tional Excellence sources	☐ Safe & Healthy Community ☐ Livable & Well-Planned Development ☐ Community Inclusiveness	
Statement: N/A			
Dookaround			

<u>Background</u>

The field of sustainability is constantly evolving with new technology and education. As such, it is essential to review new materials and information regularly.

An important function of the sustainability commission is providing educational opportunities for our members and the public, where possible. In the past 12 months, the commission has received presentations on the following topics:

- Minnesota Bee Lab, presented by Jennifer Warner from the Bee Lab at the University of Minnesota.
- United Nations Climate Change Conference, presented by State Representative Patty Acomb.

Subject: Sustainability Commission Education Opportunities

In 2021, the commission expressed interest in touring a recycling and/or organics recycling facility. Staff is currently in contact with Republic Services to set up a tour of one of their facilities this summer.

The staff has created a list of various presentation and tour opportunities the commission could take advantage of in the next 12 months. Please review the list below, consider alternative education opportunities that interest you, and be prepared to provide your top two topics at the upcoming meeting. Staff will do their best to accommodate the commission's topic preferences when searching for speakers/tours.

Potential Presentations and Tour Ideas *IF AVAILABLE:

- Presentations
 - City's renewable energy subscriptions
 - Deconstruction (vs. demolition)
 - Wetlands
 - Native plantings
 - Stormwater
 - Xcel Energy (2050 zero-carbon goal)
 - Electric Vehicles
- Tours
 - City facilities
 - Solar or wind farm
 - Local business with on-site solar
 - Hennepin County Energy Recovery Center
 - Landfill site
 - Native planting areas installed on city property

Health and Safety

Health and safety are of the utmost importance to the City of Minnetonka. Staff will ensure that all off-site tours abide by health and safety regulations provided by the State of Minnesota.



Sustainability Commission Agenda Item 7C Meeting of May 17, 2022

Title:	le: Community Solar Garden Discussion			
Report From:	Julia Wells, GreenCorps Member			
Submitted through:	bmitted through: Julie Wischnack, AICP, Community Development Director Loren Gordon, AICP, City Planner Drew Ingvalson, Associate Planner/Sustainability Coordinator			
Action Requested: Form of Action: Votes needed	☐Motion ☑Informational ☐Resolution ☐Ordinance ☐5 votes ☑N/A ☐ Oth			
Summary Statement				
remove barriers to bro	pader adoption of community barriers (financing issues, inc	that the city will "explore opportunities to solar gardens." Specifically, this item tasks cluding contacts) and the ways that peer		
Recommended Action	<u>on</u>			
Listen to the presenta at the City of Minneton	• •	omments regarding community solar gardens		
Strategic Profile Rela □Financial Strength & □Sustainability & Nat □Infrastructure & Ass Statement: N/A Community solar ba	k Operational Excellence cural Resources et Management ⊠ N/A	□ Safe & Healthy Community □ Livable & Well-Planned Development □ Community Inclusiveness		

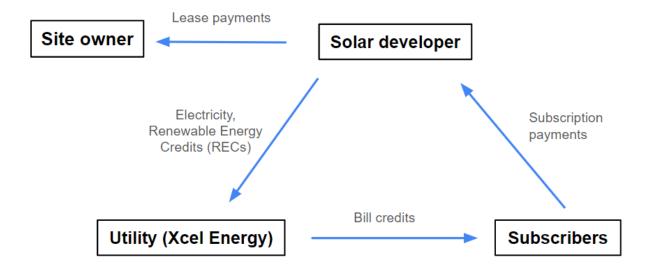
In 2013, the Minnesota Legislature passed legislation requiring Xcel Energy to create a community solar garden (CSG) program. The legislation also established the following parameters:

- Subscribers must be located in the same county as the garden or in an adjacent county (for Minnetonka, this is Hennepin, Carver, Dakota, Ramsey, Scott, Sherburne, or Wright counties)
- The garden must have at least five subscribers
- Subscribers cannot subscribe to more than 120% of their historical electric usage
- An individual subscriber cannot subscribe to more than 40% of the project's capacity

Meeting of: May 17, 2022 Subject: Community Solar Gardens

> 1 MW maximum generation capacity for each project (much smaller than a typical utilityscale solar project)

In Xcel's solar garden program, projects are typically developed by third-party solar developers. Developers lease land or a rooftop to build the garden, apply for interconnection to the electric grid, and recruit subscribers. Subscribers are allocated a share of the garden's capacity based on their historical electric usage and pay the developer for the electricity produced each month. They sign a contract to purchase energy from the developer for up to 25 years, depending on when the garden was constructed. Xcel applies bill credits for the energy produced to subscribers' electric accounts. Typically, bill credit rates are higher than subscription rates subscribers pay to the developer, resulting in a net savings. Subscribers continue to receive billing statements from Xcel, and any excess credits that accumulate are paid out once per year. Bill credits also include a transfer of Renewable Energy Credits (RECs) to Xcel.



Renewable Energy Credits

Renewable Energy Credits (RECs) represent the environmental benefits associated with the energy produced from a renewable source. REC ownership determines the claims subscribers can make about their renewable energy participation. In Xcel's community solar program, the RECs are kept by Xcel and used towards the company's renewable energy goals. This means that subscribers cannot make claims about the environmental attributes of the energy produced by the garden, such as "I use solar energy ."More information on REC ownership and claims for Xcel's renewable energy programs can be found <a href="https://example.com/here-nergy-nerg

Current barriers to adoption

About 400 Minnetonka households and businesses are currently subscribed to a community solar garden. This accounts for about 25% of community participation in renewable energy programs. Possible barriers to broader adoption of community solar include:

1. Contract terms: In Xcel territory, subscription contracts with community solar developers are up to 25 years long. Residents might be wary of making such a long-term commitment. Some developers have addressed this issue by allowing subscribers to leave the program without a fee by giving 60 or 90 days' notice. Other developers charge a fee to exit a contract early. Subscribers can typically transfer their subscription to a new address if they are staying in Xcel territory and in a county bordering the solar garden.

Subject: Community Solar Gardens

2. Working with third-party providers: Subscribing to community solar requires working with a third-party solar developer, and it is difficult to get enough information to compare companies. Information provided to Xcel by developers is incomplete. As of April 2022, 59 solar gardens listed in Hennepin and surrounding counties provided no information on availability or developer contact information. None of the four developers accepting new subscribers who live in Hennepin County had pricing information or exit terms available on their website. An incorrect website was listed for one developer. A potential subscriber would need to set up multiple consultations and calculate the net benefit of each offer to make an informed decision.

- 3. **Limited developer outreach:** Many developers focus their outreach on large commercial and institutional subscribers with large electrical loads. Residential customers with smaller electric loads are more resource-intensive to enroll and manage. There is an incentive added to the Value of Solar rate for residential subscribers through 2022, but there is not enough data available to determine how effective it has been.
- 4. **Cost:** Consumers may be required to make up-front payments or sign contracts to pay for their subscriptions in monthly installments. Some contracts can have "escalators" that increase the subscription price over time.
- 5. **Limited financial benefit:** Residential subscribers with small electric loads may not save a significant amount of money. This makes community solar less attractive for those who are not motivated by the environmental benefits alone.
- 6. **Credit scores:** Many developers require a minimum credit score. This could be a barrier for lower-income residents.

The State Attorney General's office provides information on <u>what consumers should watch out</u> <u>for</u> on their website.

While space in community solar gardens is limited, it is still available. As of April 2022, 10 solar gardens run by four developers were accepting new subscribers located in Hennepin County. However, this may not always be the case, as limits on the distribution grid and recent local restrictions on solar gardens are limiting the number of gardens that can be built in counties adjacent to Hennepin County.

Hosting solar gardens

Rooftop community solar projects are typically created with the goal of expanding access to community solar to residential subscribers. Many of these projects have also focused on targeting low and moderate-income residents. This type of solar development has been limited, as it is less profitable than large ground-mounted projects due to economies of scale and being more difficult to finance than projects with large commercial subscribers.

To host a solar garden, a host leases rooftop space to a developer. The lease agreement includes easements to ensure the panels receive enough sunlight and to allow the developer to access the array for any needed maintenance. The host also typically serves as a backup subscriber. Backup subscribers agree to subscribe to part of the array on an ongoing basis (typically 1-20%) and commit to increasing their subscription up to 40% of the energy produced if subscribers leave the program or are unable to pay. Having a flexible backup subscriber helps developers secure financing for the project while leaving most of the garden's capacity for residential subscribers. This also allows developers to set more flexible exit terms and not

Subject: Community Solar Gardens

require credit checks. Developers are typically responsible for recruiting subscribers and managing contracts and payments. Often, solar garden hosts will also participate in subscriber recruitment.

Projects in other communities:

City of Edina

The City of Edina hosts a 630 kW solar garden located on their public works building. The Energy and Environment Commission encouraged the city to host the garden as a way to support renewable energy while providing a more direct benefit to residents. Work on the project began in 2015, and the array went online in 2018 with 68 subscribers (all Edina residents). The array was fully subscribed before construction began, and there was more resident interest than available capacity.

Partnerships:

- Developer Cooperative Energy Futures (CEF) was selected through an RFP. CEF handles subscriber contracts, billing, and maintenance of the array so the city does not incur any ongoing costs.
- The city partnered with Minnesota Interfaith Power & Light to recruit subscribers.

Contract terms:

- Lease agreement: CEF is leasing the roof for 25 years. Rent is \$7,500 for the first lease
 year and escalates at 3% per year. Edina's facilities manager noted an issue with the
 facility's roof replacement schedule not matching what was in the contracts and
 recommended making sure anyone impacted by the lease agreement has an opportunity
 to weigh in.
- Subscription agreement: Edina subscribes to a small portion of the array and receives bill credits on an ongoing basis. If needed, the city is a backup subscriber for up to 40% of the project.

Cooperative Energy Futures, the developer, prioritizes flexible exit terms for subscribers. If they move, subscribers can transfer their subscription to a new eligible address in Xcel territory or transfer the subscription to a new subscriber they identify with no fee. They can also terminate the subscription with three months' notice. Since the project went online, some subscribers have left the program, and subscriptions have been reallocated. CEF was able to find replacement subscribers, so the city has not needed to take on any additional capacity as a backup subscriber.

Edina is not currently working on any other community solar projects. The city's climate action plan set a goal of installing 1 MW of solar on city properties by 2030. These projects will be netmetered, so they can keep the RECs and count the emissions reductions towards their climate goals.

City of Eden Prairie (in progress)

The City of Eden Prairie is in the process of developing a 1 MW community solar garden on its community center roof. Hosting a community solar garden was identified in the city's climate action plan as a strategy to increase local participation in renewable energy programs. Before working on this project, the city already had a large CSG subscription and three solar arrays exclusively for city operations. Around 150 households are signed up to participate. There was so much interest the city had to turn some residents away. Twenty-five percent (25%) of the

Subject: Community Solar Gardens

project was set aside for renters and low/moderate-income residents. The city did not set a specific income limit for these participants since the process of verification would have been too cumbersome. Instead, they worked to target groups who don't usually get to participate in renewable energy projects, such as residents in affordable housing, new immigrants, and renters.

Partnerships:

- Developer Cooperative Energy Futures (same as Edina project) was selected because they were the only developer experienced in coordinating and financing residentialfocused projects. City staff were familiar with CEF since they had previously developed a community solar project in Eden Prairie hosted by a church.
- The city did not partner with any outside organizations. City staff did outreach through online and in-person events, including targeted outreach to LMI properties in multiple languages.

Contract terms:

- Lease agreement: CEF is leasing the roof for 25 years. Rent is \$2,000 per year.
- Subscription agreement: The city is serving as a backup subscriber for the project. Their
 ongoing subscription is only 1 kW (the minimum needed to sign the contract) to
 maximize the capacity available for residents.
- By design, there is not a significant financial benefit to the city.

CEF offered subscribers the option to pay upfront for the most savings or an option to pay-as-you-go to avoid any upfront cost. Pay-as-you-go subscribers will pay CEF about \$.01/kWh less than the Value of Solar bill credit rate. The subscription rate escalates at 1.5% for ten years and then stays flat. This means a household using 840 kWh/month would see savings of around \$7.50/month in the first year and around \$50/month in year 25. This is a savings of over \$6,000 over the 25-year contract.

The city signed the lease agreement with CEF in 2019. Construction has not yet begun due to delays with Xcel's interconnection process.

Other projects hosted by public entities

Minneapolis Public Schools: 365 kW array on school building

This garden is reserved for households at or below 80% AMI. The developer, Renewable Energy Partners, was selected through an RFP. Job training was provided to local residents as part of the installation process. Minneapolis Climate Action, a 501c(3) non-profit, will recruit and manage subscribers. MPS will subscribe to 10% of the array, and the City of Minneapolis will subscribe to 10% and serve as a backup subscriber.

Minnesota Department of Transportation (MnDOT): 1 MW carport on Minneapolis parking ramp

All subscribers are residential, including some LMI residents in affordable housing. The developer was Cooperative Energy Futures. MnDOT subscribes to 20% of the array and serves as a backup subscriber. Cost savings for MnDOT operations was the main motivation for the project.

Subject: Community Solar Gardens

Solar potential for city buildings

Although most of the city's electric use is already subscribed to community solar, the subscription has not yet been resized following the new public safety building construction, which was completed in 2021, adding an additional electric load. This means the current subscription will be slightly under total electric use when all gardens are built out, allowing the city to add additional solar (either behind the meter or community solar subscription) and stay under the limit of 120% of historical electric usage allowed by community solar legislation.

The public works building is capable of supporting the solar panels. A solar array project was planned for solar in 2025. However, due to the rising costs of building materials, it may need to be delayed to 2026 or 2027 to support the funding. The roof is 17 years old and would need to be replaced before an array is installed. The public safety facility was built to be solar-ready to allow structural support of future solar panels and would likely have a solar array installed after the public works building. Existing and open area garage space at the public works building allows for an easier, cost-reduced installation of solar panels as compared to the newly constructed public safety facility.

Other ways to support community solar

Clean Energy Resource Teams (CERTs) have identified other ways to support community solar without hosting a garden on city property.

- 1. **Promotion:** Educate residents on the benefits of community solar and how to sign up.
 - Some outreach on community solar was done through the implementation of the renewable energy focus area of the Energy Action Plan.
 - The city could work with Xcel Energy to create a reliable list of CSG providers available (including pricing, contract, and cancellations); however, this would require constant attendance as spaces fill, prices change, and CSGs close.
 Prices can also differ across gardens developed by the same provider, as the bill credits paid to subscribers are based on the year the garden was constructed.
 - Also, this could be difficult to do effectively without endorsing certain providers, the way we are able to do with Home Energy Squad visits.
- 2. **Planning:** Include community solar participation targets in energy, climate action, or other relevant plans.
 - The renewable energy focus area of Minnetonka's Energy Action Plan set a goal
 of increasing residential CSG subscribers to 250 in 2021 and 442 by 2023.
 - Progress towards these goals does not count towards GHG emissions goals since the RECs do not stay in the community.

Several cities have included goals around community solar in their Climate Action Plans.

- **St. Louis Park:** Provide resources for residents and businesses on community solar. Consider hosting a CSG if RECs can be kept in the community, especially for buildings where potential solar generation would exceed the 120% of electric use allowed under net metering.
- **Edina:** Explore programs using in-community renewable energy to benefit low-income community members.
- **Eden Prairie:** Develop a CSG to encourage local participation in renewable energy programs.

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Subject: Community Solar Gardens

- 3. **Site identification:** Recruit suitable buildings for a CSG (commercial, multifamily, faith communities, non-profit, etc.) and facilitate connections with developers.
 - This could include existing buildings or facilitating partnerships with developers to incorporate CSGs into new multifamily or commercial construction.
- 4. **Backup subscription:** As an entity with a large, stable electric load, serve as a backup subscriber for a CSG hosted by another entity.
 - The City of Eden Prairie is a backup subscriber for a garden hosted by a local church.

Considerations for hosting potential on-site projects

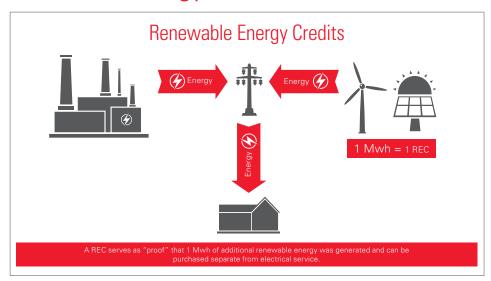
- 1. **RECs:** Does Minnetonka anticipate wanting to keep RECs from solar projects to meet future climate goals?
 - The RECs from a community solar project hosted by the city would belong to Xcel and would not stay in the community.
 - This could be a reason to own and net-meter an array instead.
- 2. **Cost:** Should the project provide a financial benefit to the city? If so, how much?
 - There are no upfront or ongoing costs to host a CSG. However, significant staff time would be needed to develop contracts and recruit subscribers.
 - Lease payments would provide a source of revenue. Higher lease payments could result in a smaller net benefit to subscribers.
 - The city could subscribe to 10-20% of the garden, which would provide savings on city electric costs but leave less capacity open for residents.
- 3. **Engagement:** Previous community solar projects have generated positive community engagement around renewable energy and provided a unique opportunity for residents to participate without the upfront cost.
 - Should a project target low and moderate-income residents in some way?
 - Could a project be integrated with other programs around housing affordability?

Colorado



Together, we can deliver a clean energy future.

Renewable Energy Credits (RECs) represent the environmental benefits associated with energy produced from a renewable source. When you participate in a renewable energy program, it is important to know when the RECs are included with the program, or when they are kept by Xcel Energy and used toward our company's renewable energy goals. The REC is the piece that determines the statements or claims you can make regarding your renewable energy participation.



Explore your renewable energy options and claims.

Renewable Energy Option	Solar*Rewards®	Solar*Rewards Community® (SRC)	Windsource®	Renewable*Connect® (R*C)	Net Metering
Description	Install your private on- site solar system and earn an incentive for transferring the RECs to Xcel Energy.	Subscribe to third- party solar gardens and receive payment for solar energy produced and RECs.	An easy, low cost, low risk way to subscribe to clean wind energy and keep your RECs.	An easy way to subscribe to up to 100% solar energy, keep the RECs at little to no cost and potentially save on energy bills.	Install your own solar and get credit for excess solar production and keep your RECs.
Claims	I support renewable energy I support solar The solar on my house helps reduce global carbon emissions I support renewable	I support renewable energy I support local solar development My solar garden subscription helps to reduce global carbon emissions	I support renewable energy I use local wind energy I offset my carbon footprint with my Windsource subscription I am helping fund development of new local renewable resources	I support renewable energy I use local solar energy I offset my carbon footprint with my R*C subscription I am directly funding additional local solar development	I support renewable energy I use solar energy I offset my carbon footprint with my solar system
REC¹ Owner	Xcel Energy	Xcel Energy	Participant	Participant	Participant

Renewable Energy Credits (RECs) are considered currency used to measure renewable energy produced and used to meet renewable energy goals. If the renewable program allows you to keep the RECs, you can claim that they are offsetting your energy use or are using renewable energy. If the renewable program shifts the RECs to us, you are unable to claim that you offset energy use with renewable energy. Xcel Energy certifies Renewable*Connect and Windsource RECs through green-e.org and designs renewable choice offerings to align with the Renewable Energy Buyers' Principles at buyersprinciples.org.

Community Solar Gardens



Many people want to support renewable energy as a way to help the environment. The Minnesota Legislature established an option for customers of Xcel Energy to support community solar, also referred to as "solar gardens" or "solar farms." While only Xcel was required to develop a community solar program, other utilities are developing their own programs. Some consumers may find that community solar provides a better option for them to support renewable energy than installing solar panels or participating in utilityrun programs. Consumers should be vigilant, however, in evaluating any offer to participate in community solar.

What is "Community Solar"?

Community solar allows groups of consumers to purchase "subscriptions" to a central solar facility and receive credit on their electric bills for the energy it produces. Community solar may be viewed as an alternative to "net metering," in which utility customers have solar panels installed on their own rooftops and use the power they produce while excess energy flows back to the power grid.

With community solar, consumers do not install solar on their rooftops. Instead, a central solar facility is constructed for multiple customers, who each subscribe to a portion of the project. These consumers continue to purchase their electricity from their utility, but receive a credit on their utility bills for the energy that is produced by their portion of the solar facility. The energy is then provided to the utility in exchange for each subscriber's bill credit. Because it does not require rooftop installation, community solar may be appealing to people who want to support solar, but cannot or do not want to install solar panels at their own homes.

Who is Offering Community Solar Subscriptions?

While some utilities and cooperatives have their own community solar projects, Xcel's community solar program relies on independent developers who contract to provide the power to Xcel. Xcel agrees to purchase the power from the solar garden and provide a bill credit for subscribers. With some limited exceptions, Xcel does not participate in the construction of the facility or evaluate the contracts between the solar gardens and their subscribers. Instead, consumers enter into contracts with one of these independent developers, so they should carefully research the company they are working with, before signing a contract or paying money.

How Much do Community Solar Subscriptions Cost?

There are a variety of ways that companies structure community solar subscriptions, and new models are constantly being developed. This can make it difficult for consumers to evaluate and compare subscription offers from different companies. In general, depending on the size of the subscription and how it is structured, costs may vary from a single payment for thousands of dollars to monthly payments of a hundred dollars. Solar garden companies may suggest that consumers will save money overall when they consider the credits they will receive on their utility bills. Consumers should carefully evaluate these claims and understand the costs they are committing to pay without considering the potential bill credit. Consumers should also make sure they understand the assumptions the company has made in making projections of potential savings. To the extent these projected savings rely on future energy costs, the assumptions may or may not be reasonable.

How are Community Solar Subscriptions Sold?

Community solar companies have used a variety of tactics to contact consumers and sell subscriptions, including: mass mailings, door-to-door marketing, and advertising on radio, television, and the internet. Consumers should evaluate these marketing pitches with the same scrutiny that they use to evaluate any other advertisement.

What Should Consumers Watch Out For?

Consumers should make sure they fully understand a subscription agreement and carefully consider whether they are willing to commit to its terms. The following are several important aspects of these contracts for consumers to consider:

Cost

Consumers may be required to make up-front payments or sign contracts to pay for their subscriptions in monthly installments. Many of these monthly subscription contracts can have "escalators" that increase the subscription price over time. For instance, a solar garden may offer a consumer a subscription price that increases every year by a set percentage. The solar garden may also suggest that these price increases are smaller than a utility's typical rate increases and that the consumer will therefore save more money over time. Since utility rate increases must be approved by the Minnesota Public Utilities Commission, consumers should be careful to evaluate any suggestion that utility rates will increase in the future by any set amount.

Length of Subscription

In general, consumers who purchase community solar subscriptions must make long-term commitments, which are typically 25 years. While consumers can be allowed to "break" these commitments before they expire, they must typically pay a penalty to the solar garden company to do so. Cancellation penalties can be expensive. Therefore, consumers who are considering purchasing community solar subscriptions should consider whether they are able to commit to the entire term of these agreements and the penalties they will incur if they must break that commitment.

Production of the Facility

The sun does not always shine in Minnesota. Developers rely on models to estimate the production of their facilities. A solar developer's claim that its facility will produce a certain amount of energy may not pan out. The Public Utilities Commission has not standardized the method developers use to estimate the production of their facilities. Therefore, consumers should know how the energy production of a solar garden will impact their costs, and whether they think the production estimates are reasonable.

Renewable Energy Credits

Many people want to purchase community solar subscriptions in order to support renewable energy. Consumers should be aware, however, of exactly how far their support goes. Many community solar projects have elected to sell the renewable benefits of their facilities—known as renewable energy credits or "RECs"—to Xcel. If a community solar developer elects to sell the RECs to Xcel, consumers need to know that they are not purchasing or using "renewable" energy. Instead, these RECs can be used by Xcel to meet its renewable energy mandates or, if Xcel has met its mandates, can be sold by Xcel to others. This may lower the need of Xcel or an entity who purchases RECs from Xcel to construct additional renewable facilities.