



Going Farther Together:

How 31 Local Governments Collaborated to Procure Solar Garden Subscriptions at Low Cost

Trevor Drake
Great Plains Institute
Clean Energy Resource Teams (CERTs)

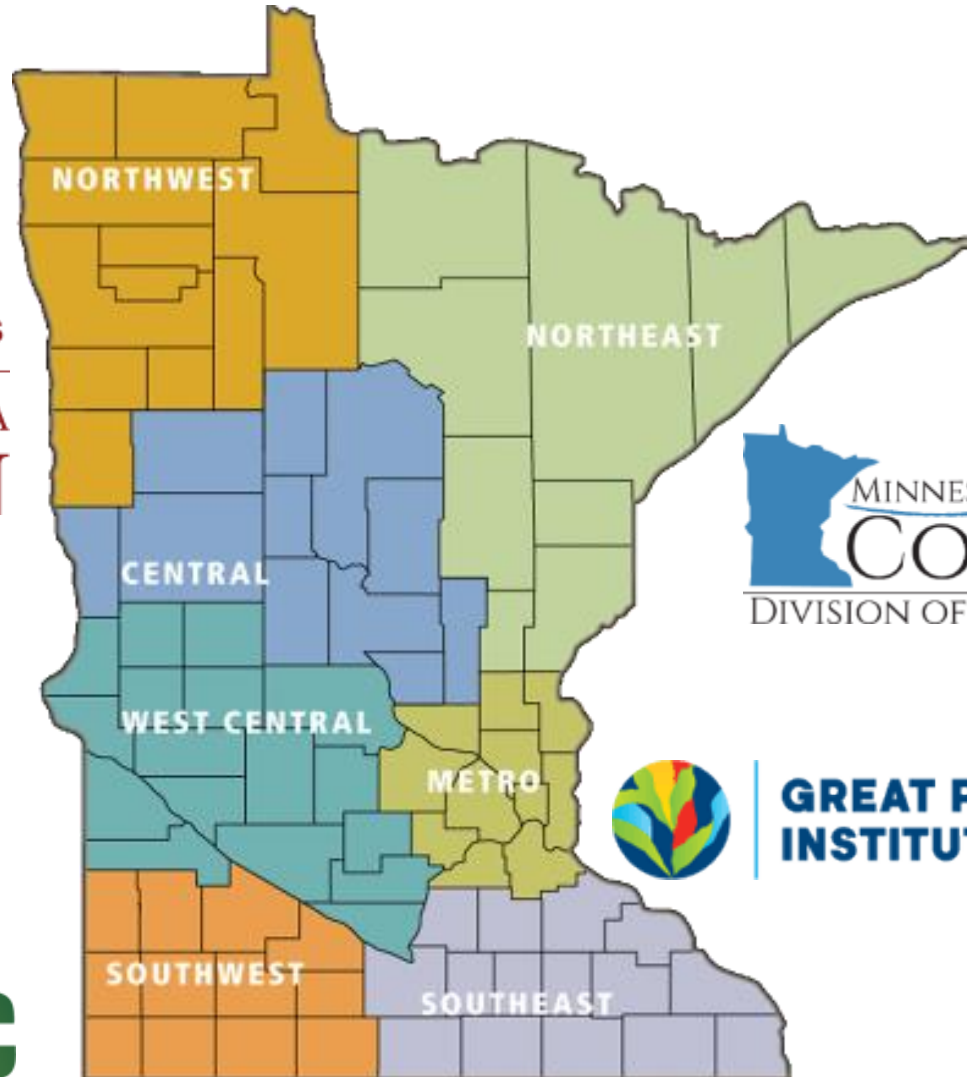


Statewide Partnership & Collaboration



Regional Sustainable
Development Partnerships

UNIVERSITY OF MINNESOTA
EXTENSION



**GREAT PLAINS
INSTITUTE**

Better Energy.
Better World.



CERTs: We're here to help

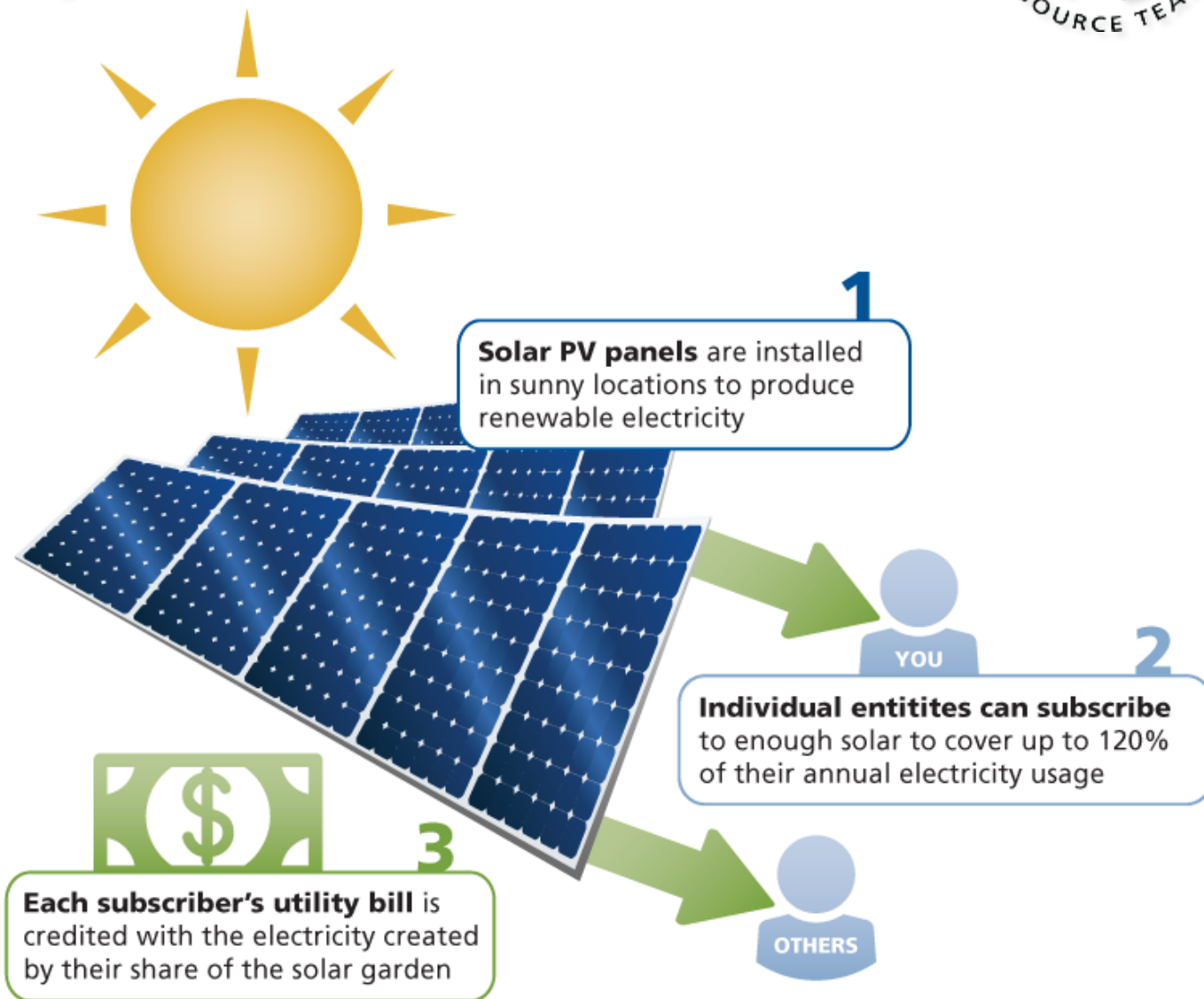


CERTs Mission: Connect individuals and their communities to the resources they need to identify and implement community-based clean energy projects



Community Solar Gardens

Definition:
Centrally-located solar PV systems that provide electricity to participating subscribers



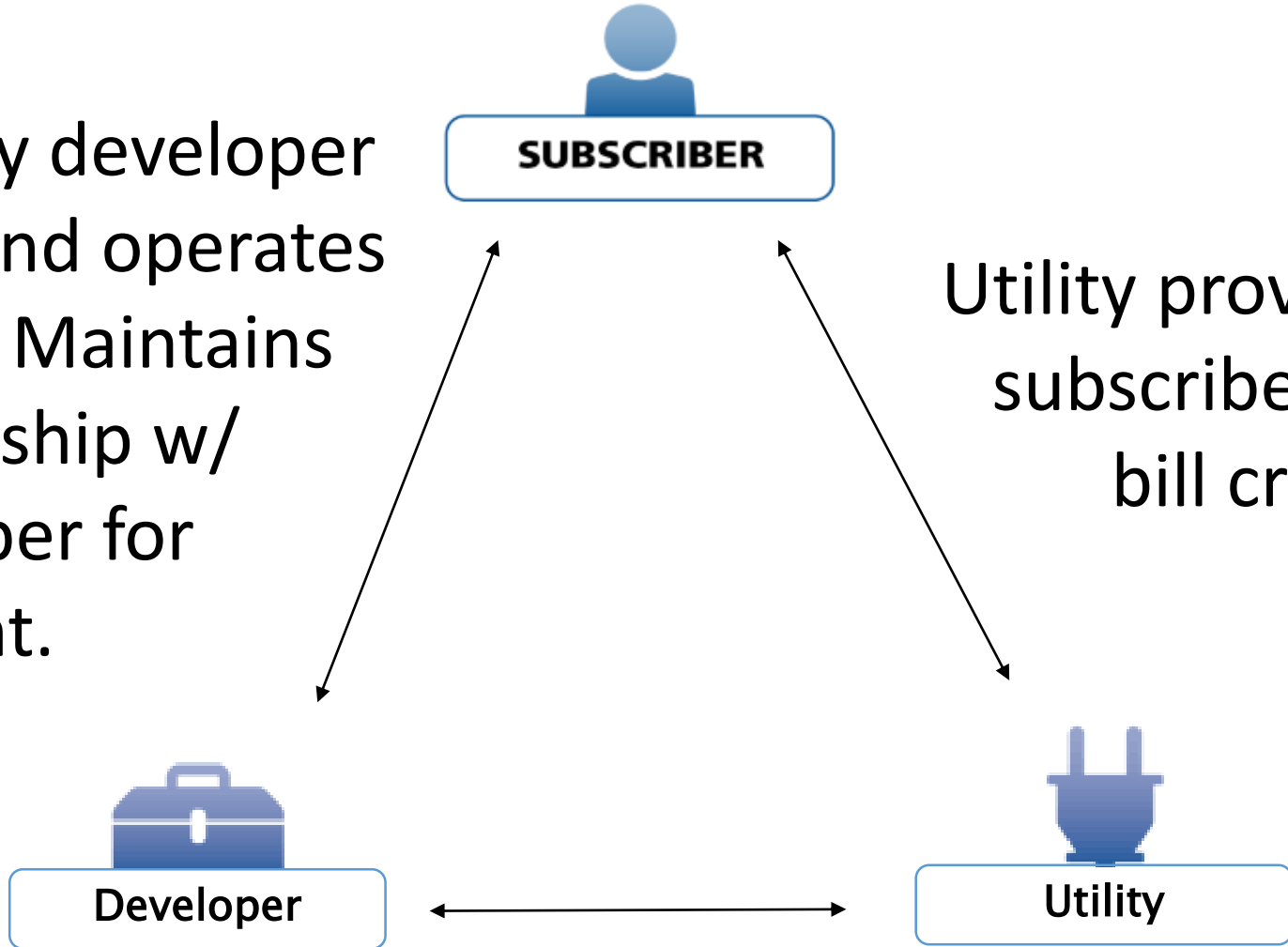
2013: Minnesota Statute 216B.1641

Xcel Energy “shall file by September 30, 2013, a plan with the commission to operate a community solar garden program...”



December 2014: Program Opens

3rd-party developer builds and operates garden. Maintains relationship w/ subscriber for payment.



Utility provides subscriber w/ bill credit.

BUSINESS

Xcel gets 427 solar garden applications in Minnesota

The projects in Minnesota, if all built, would have the combined output of a major power plant.

By David Shaffer (<http://www.startribune.com/david-shaffer/10645931/>) Star Tribune |

DECEMBER 19, 2014 — 9:10PM

In the week since opening Minnesota's door to community solar gardens, Xcel Energy Inc. said Friday that 427 applications have arrived from energy developers, a much bigger response than anticipated.

The Minneapolis-based company said the applications propose a total of 420 megawatts of solar output, or the equivalent of a sizable power plant. A megawatt is 1 million watts.

"It is a gaudy number — I am a little shocked," said solar developer Rob Appelhof, president of Cedar Creek Energy of Coon Rapids, which has not yet submitted its four planned solar gardens.

Program Rules



SUBSCRIBER

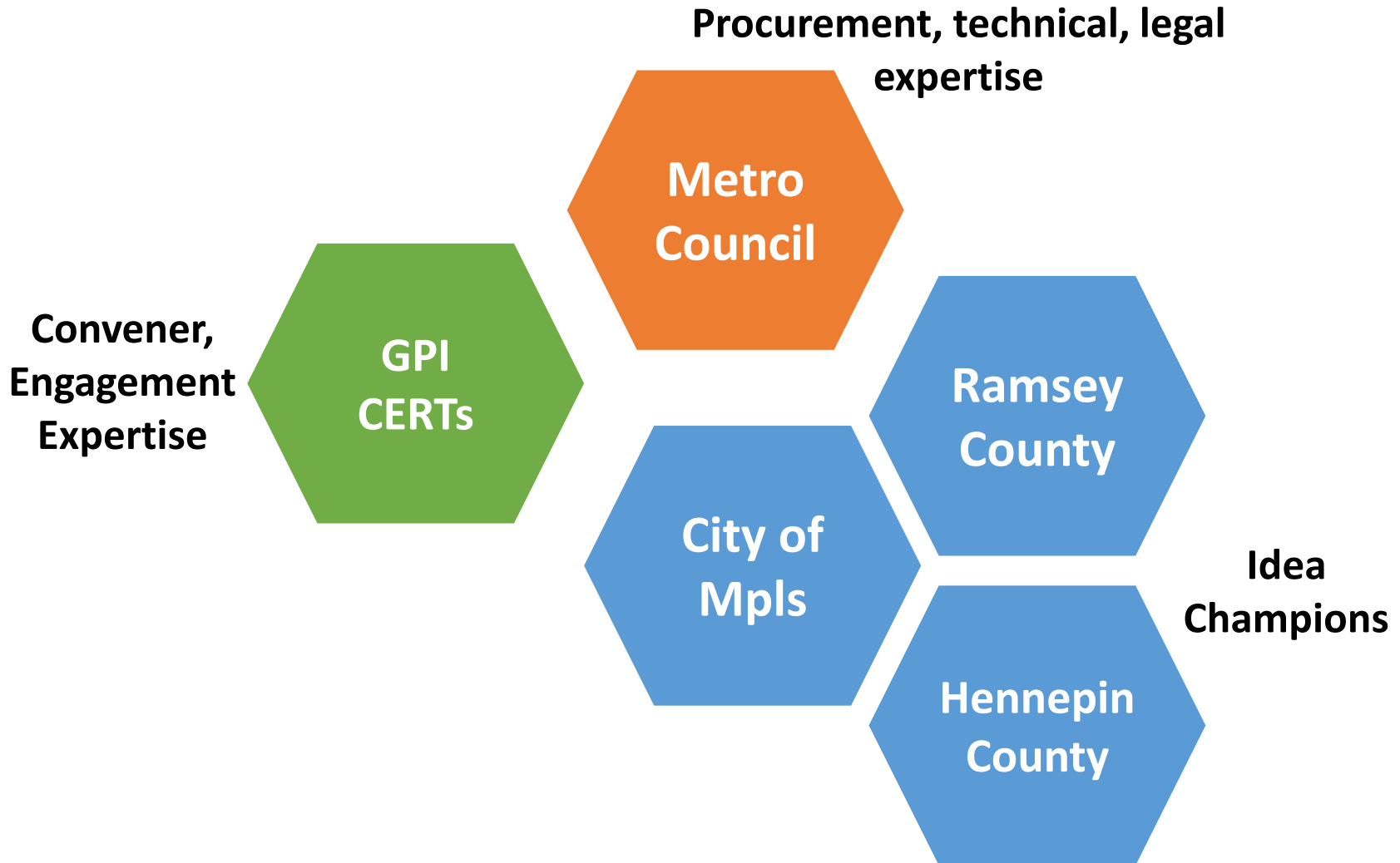
- Subscriptions can cover up to 120% of annual electricity usage
- Must be in same or adjacent county to the garden



GARDENS

- No limit on total number
- Individuals gardens limited to 1 MW capacity
- Must have at least 5 separate subscribers, with no subscriber > 40% share

Spring 2015: Formation of Steering Committee



June 2015: Kick-off Meeting



Image Credit: <http://operations.nfl.com/the-rules/evolution-of-the-nfl-rules/>



Project Phases

1

Letters of Intent
Request for Proposals

2

Developer Selection
Lottery Process
Execute Subscription Agreements

3

Gardens Approved by Xcel
Garden Construction
Energy Produced; Bill Credits Received

June-July 2015: “Non-Binding” Letters of Intent to Subscribe



Image credit: <http://www.pbs.org/wnet/secrets/real-trojan-horse-preview/2273/>

June-July 2015: “Non-Binding” Letters of Intent to Subscribe



1. Must submit in under 2 months
2. Must come from proper authority
(council/board)
3. Must declare how much you electricity you will
subscribe if given a “favorable offer”
 - Declared loads will be broken into tickets sized at
250kW (equal to 1/5 of a garden) and entered into
a lottery for available subscriptions

June-July 2015: “Non-Binding” Letters of Intent to Subscribe



1. Must submit in under 2 months

31 Entities seeking 180 MW total

subscribe if given a “favorable offer”

- Declared loads will be broken into tickets sized at 250kW (equal to 1/5 of a garden) and entered into a lottery for available subscriptions

August – December 2015: RFP, Selection, and Negotiation



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- Procurement led by Regional Council on behalf of participants
- Selection team comprised of participants and technical experts
- Rank according to qualifications, experience, and price
- Procurement staff negotiate final contracts



August – December 2015: RFP, Selection, and Negotiation



- Procurement led by Regional Council w/ selection team comprised of participants and

5 Vendors offering 70 MW total

and price

- Negotiate final contracts



January 2016: Lottery!



Image Credit: <https://www.psychologytoday.com/blog/affluence-intelligence/201203/lottery-itis>

February 2016: Sign-On Process



- Can ONLY accept or deny offers, no changes to contracts
- 1.5 months to take action
- LOTS of technical assistance provided on evaluating offers -- webinars, emails, tools, 1-on-1 calls
- Participants were able to talk to one another about their opinions of the offers

Results



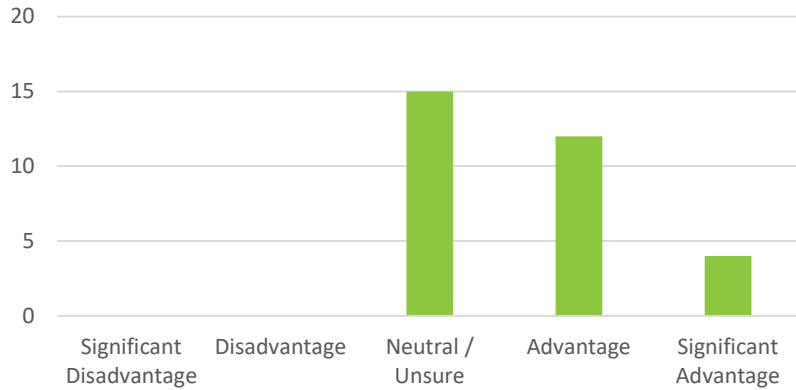
44 Government entities attended the project kick-off meeting

31 Submitted letters of intent

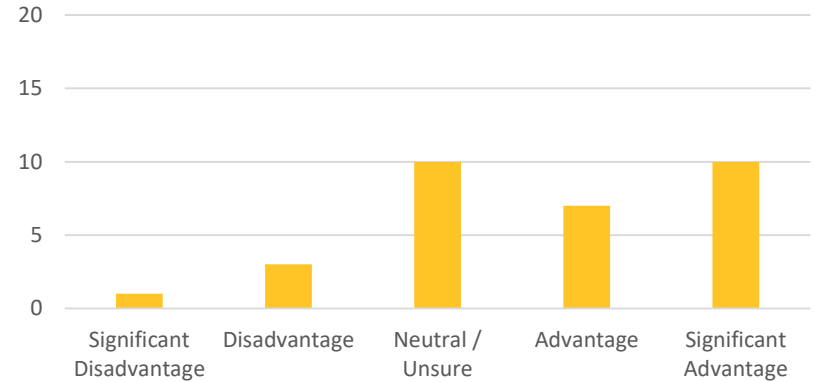
24 Signed agreements
~ 35 MW Solar
~ 42,000,000 kWh Annual Production

What were the advantages of participating?

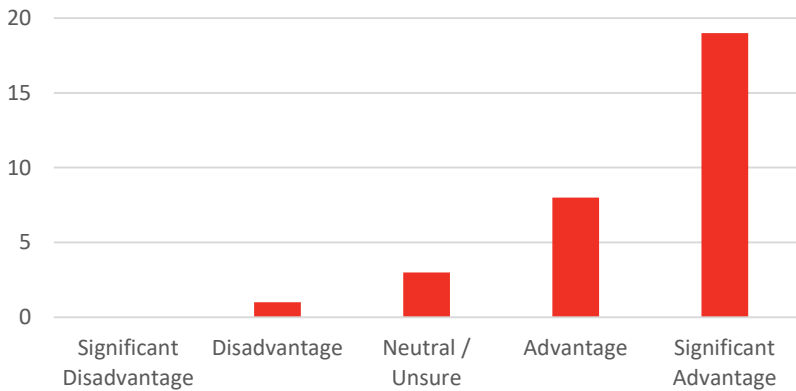
Better Pricing



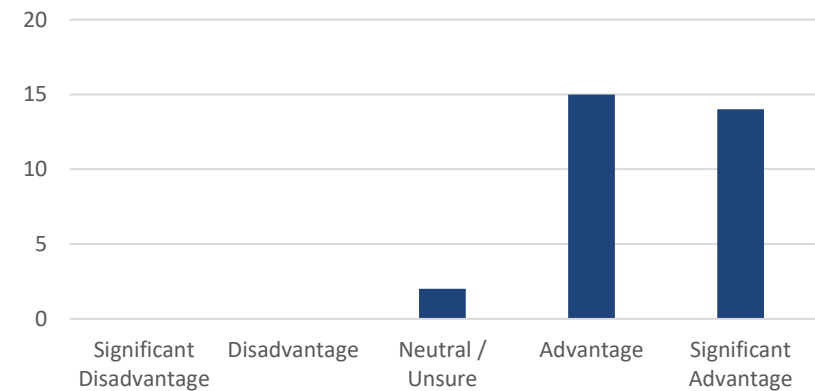
Fast Entry to Market



Reduced Staff Time



Peer Learning



What were the benefits of participating?



“Significantly reduced city expenditures in terms of contract drafting, proposal vetting, and overall staff time required to participate.”

“Our city attorney advised an RFP was required and we would not have the capacity to manage this with our current staffing.”

“Educational and financial analysis tools provided helped with communicating to elected officials.”

“It created a "bigger than just us" environment and that helped others in our organization feel more comfortable with the topic and the process.”



Suggestions for Replicating

1. Form a Steering Committee
2. Understand the rules, but don't let them hold you back
3. Maintain frequent communication with participants
4. Use behavior change strategies
 - Urgency
 - Scarcity
 - Commitments
 - Social Diffusion
5. Be inclusive

Thank You!



tdrake@gpisd.net

mncerts.org/solargardens/collaborative

