Solar Technical Assistance in the Region

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Committee of the Whole

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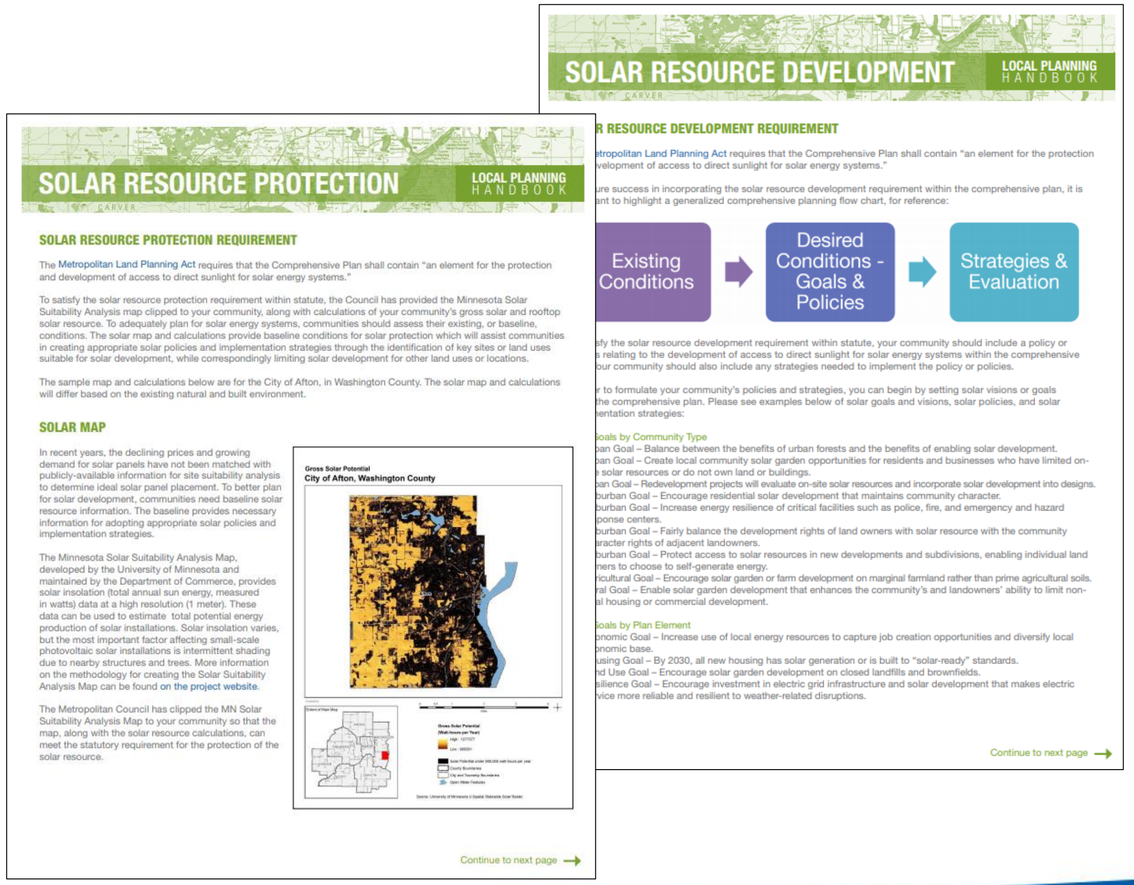
Objectives

- Communicate the breadth of the Community Development division's solar efforts.
  - *Incorporating Solar & Resilience into our everyday work*
  - *Our Projects and Partnerships*
  - *Research & Analysis*

- Communicate the focus and workings of the "Solar-for-Vouchers" program specifically.

Incorporate Solar & Resilience into our everyday work



Technical assistance programs & reviews

- Comprehensive Plans
- Environmental Reviews
- Livable Communities Accounts

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Incorporate Solar & Resilience into our everyday work

SolSmart Solar Best Practices Program

- Permitting, Planning, Zoning
- Ordinances & MN Statutory Rights
- Utility & Community Engagement

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Incorporate Solar & Resilience into our everyday work

The Edina Community Solar Garden, insta
courtesy IPS Solar)

Why a Minnesota apartment project is a pioneer in solar development

Inventory & Elevate National & Local Equitable Solar Energy profiles

- Projects & Pilots
- Initiatives & Policies
- Practices & Priorities

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Partnerships & Collaborations

Minneapolis – Green Cost Share Applicant Review Committee

- Track solar development trends
- Lessons learned from new policies, practices, priorities, & procedures

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Partnerships & Collaborations

MN Solar Pathways, Technical Committee

- Multi-sector, multi-agency, state-wide research project funded by the U.S. Department of Energy
- Technical & Land Use viability of 70% solar + wind statewide by 2045
- Project Duration 2015 - 2020

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Partnerships & Collaborations

Solar Energy Innovation Network

- Potential Co-Benefits to Solar Canopy & EV Charging Integration
- Private, Utility, Non-Profit, Federal, State, regional, and local government partners (Community Development & Metro Transit Divisions)

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Partnerships & Collaborations

Office of
ENERGY EFFICIENCY &
RENEWABLE ENERGY

U.S. Department of Energy – Equitable Solar Grants Review Committee

- Learn about leading projects, initiatives, and potential partners for promoting solar equity
- Develop solar equity analysis skills

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Partnerships & Collaborations

Minnesota Pollution Control Agency Solar PV Recycling Committee

- State & local agencies, scientists, solar developers, trade associations, and manufacturers
- Align regulations, policies, and permitting requirements.
- State recommendations Fall 2020

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Partnerships & Collaborations

Education & Outreach

- Promote increased diversity in policy, planning, and public service pipeline
- Prioritize predominantly BIPOC schools & classrooms
- Promote our work and solicit feedback

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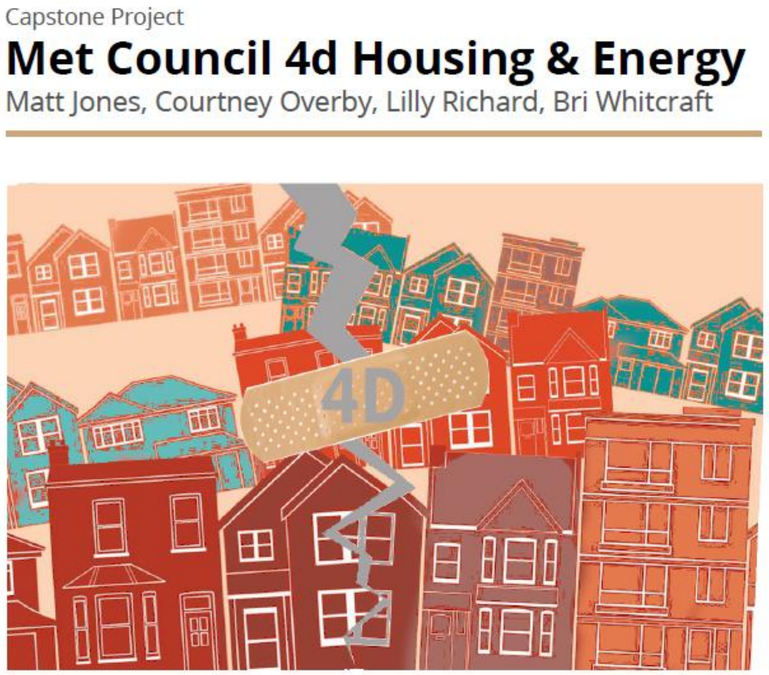
Partnerships & Collaborations



University Partnerships Supporting Solar Research

- “Carbon Sequestration benefits of Green Roof & BioSolar systems”
- “Region 4D, Efficiency, & Solar Analysis”
- “Climate Change Communications Strategies”

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Partnerships & Collaborations

MN Brightfields Initiative

- MN Environmental Quality Board “Solar on Closed Landfill Study”
- Metro Closed Landfills could meet all electricity needs in City of Cottage Grove
- MN EQB Recommendations due December 2020

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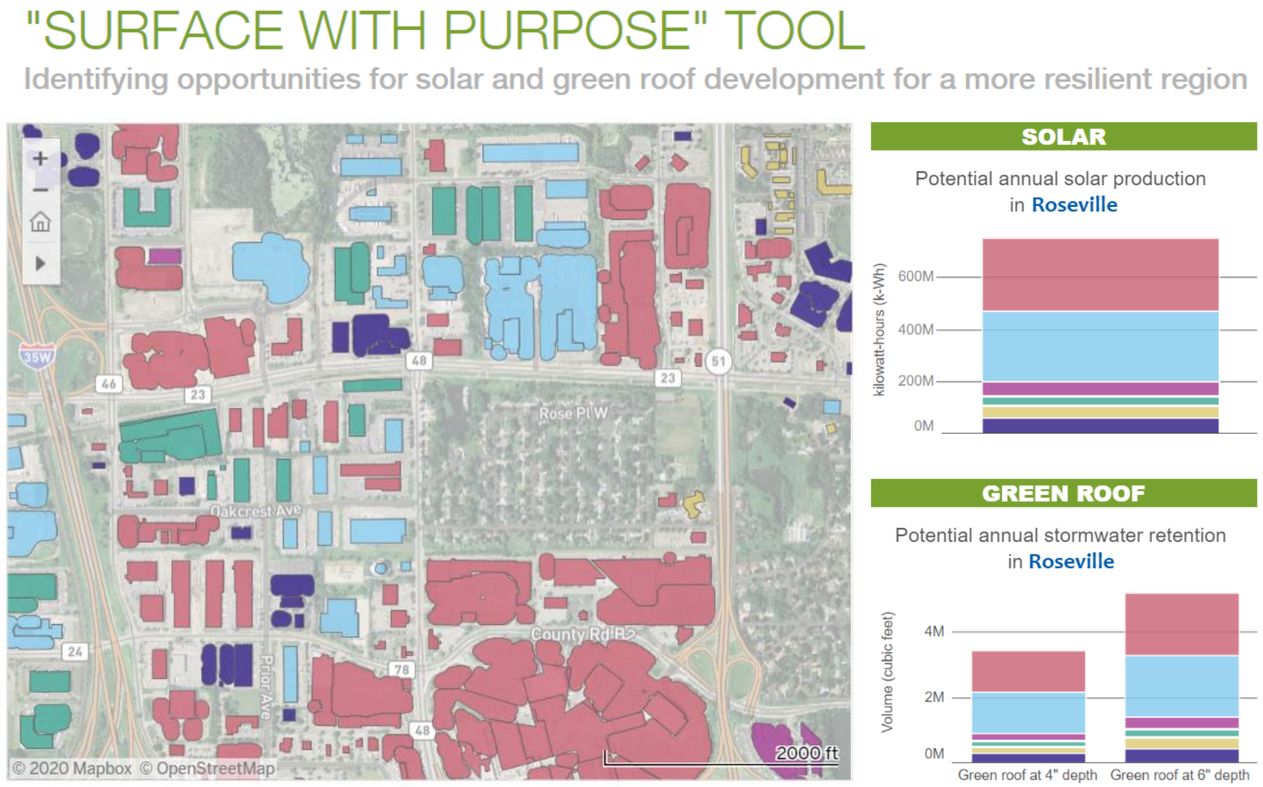
Research & Analyses



Surface with Purpose: Mapping & Impact Analysis for Climate Resilience & Equity Strategies

- Solar Production & Stormwater Retention
- Reduce Greenhouse Gas emissions, Urban Heat Island effect, localized flooding
- Improve air quality, water quality, and carbon sequestration

https://metrocouncil.org/Communities/Planning/Local-Planning-Assistance/Solar/Surface-with-Purpose-Interactive.aspx

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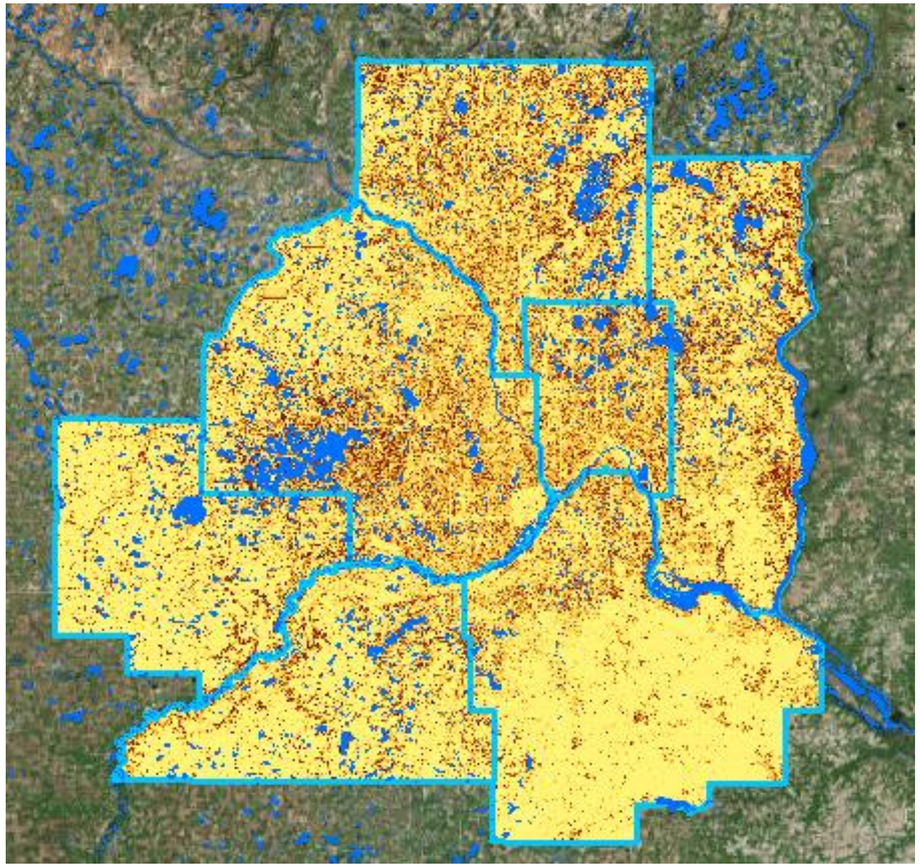
Research & Analyses



Solar Mapping & Offset Potential

- Xcel residents and businesses spent $2.2B on electricity across 74 communities in 2017.
- Rooftop solar production could conservatively offset 2/3 of all metro area electricity use.
- Typical rooftop solar has payback period between 7-15 years.

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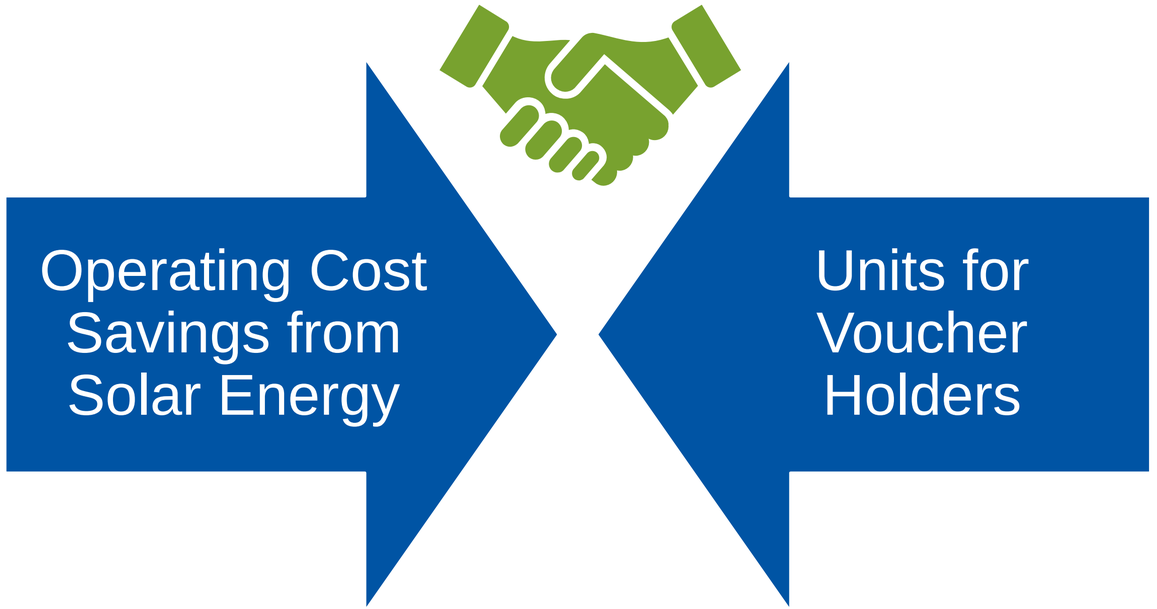
Solar-for-Vouchers Technical Assistance Program



The Idea

Leverage solar energy assistance to expand housing choice for low-income residents.

Serve Two Thrive Goals through Thrive Outcomes

Equity	•Expand the housing choices of low-income residents.
Sustainability	•Promote the adoption of renewable energy sources.

Technical Assistance Structure

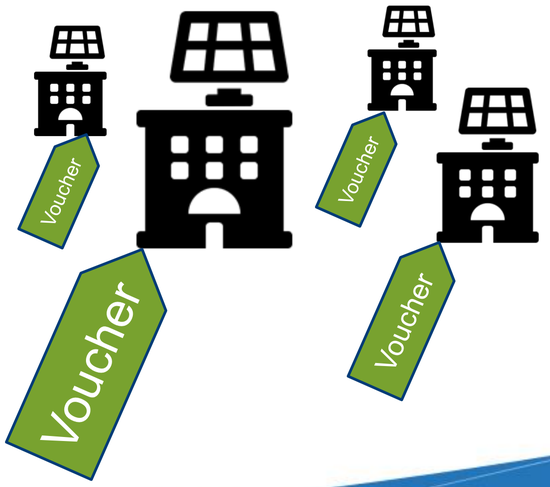
Solar Developer

Solar Developer

Solar Developer

Solar for Vouchers Technical Assistance Program

Multi-Family Property Owners



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Reasons for Program Participation

Why would Solar Developers Participate?

Solar for Vouchers Technical Assistance Program

Why would property owners participate?

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Pilot Program Timeline

Q4 2020 – Q1 2021
- Education & Solicitation

Q1 2021 – Q2 2021
- RFQ & Developer Selections

Q2 2021 – Q3 2021
- Site Visits & Solar Proposals

Q4 2021
- Solar & HRA Agreements Finalized

Q1-Q4 2022
- Solar Installs & HRA Move-Ins

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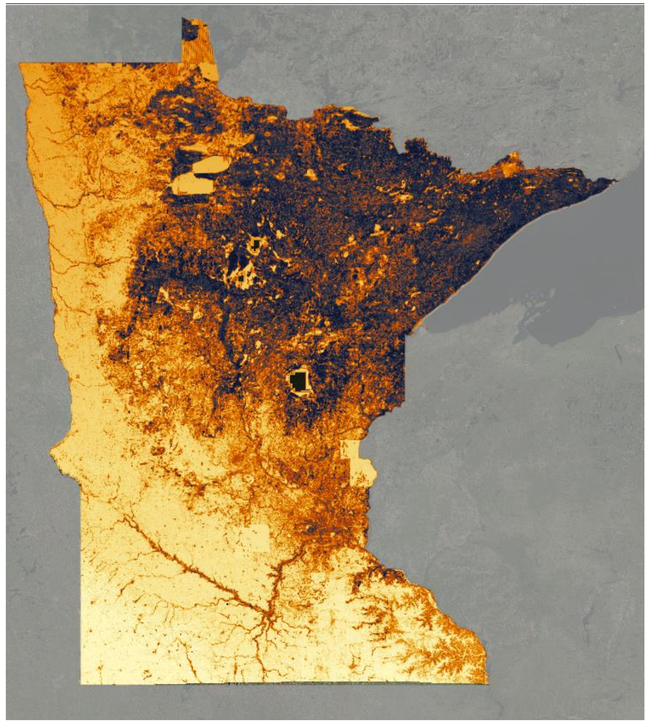
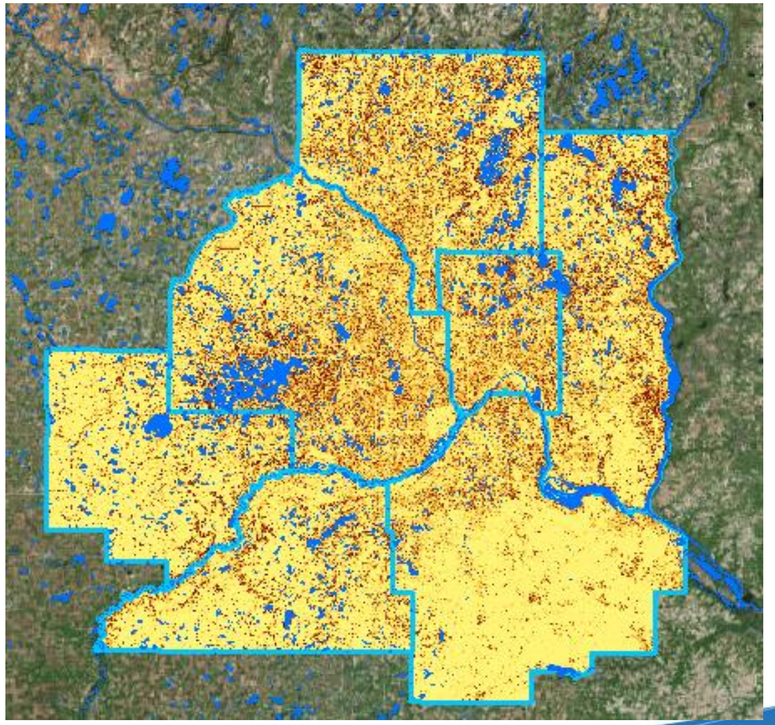
Next Steps



- Evaluation, analyses, and reporting
- Develop recommendations for scale-up and roll-out of program



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