

Neighborhood Community Solar Garden Initiative

1/3/22

Project Goals

- Leverage long-dormant NEIGHBORHOOD NRP balances to develop Community Solar Gardens
- Deliver significant, multi-decade financial benefits to NEIGHBORHOOD neighborhood council via CSG ownership
- Expand access to solar energy benefits for NEIGHBORHOOD residents
- Demonstrate equitable sharing of solar energy benefits
 - CSGs can be targeted for renters, households below 80% AMI
- Support local job training in solar and energy-related careers
 - Job training targeted for low-income, BIPOC youth and young adults
- Support MPS solar and renewable energy STEM education
 - Broad-based STEM teaching tools for youth and adults
- Contribute to City's efforts to combat climate change

Project Partners

- Minneapolis Neighborhoods: funding (NRP), governance, promotion
- Minneapolis Climate Action: project management, promotion
- Renewable Energy Partners: project development, job training
- Minneapolis Public Schools: Curriculum and STEM program partner
- Center for Energy and Environment [??]: Energy Audit and Retrofit Partner
- Tax Equity Partner: financing of tax credits and construction

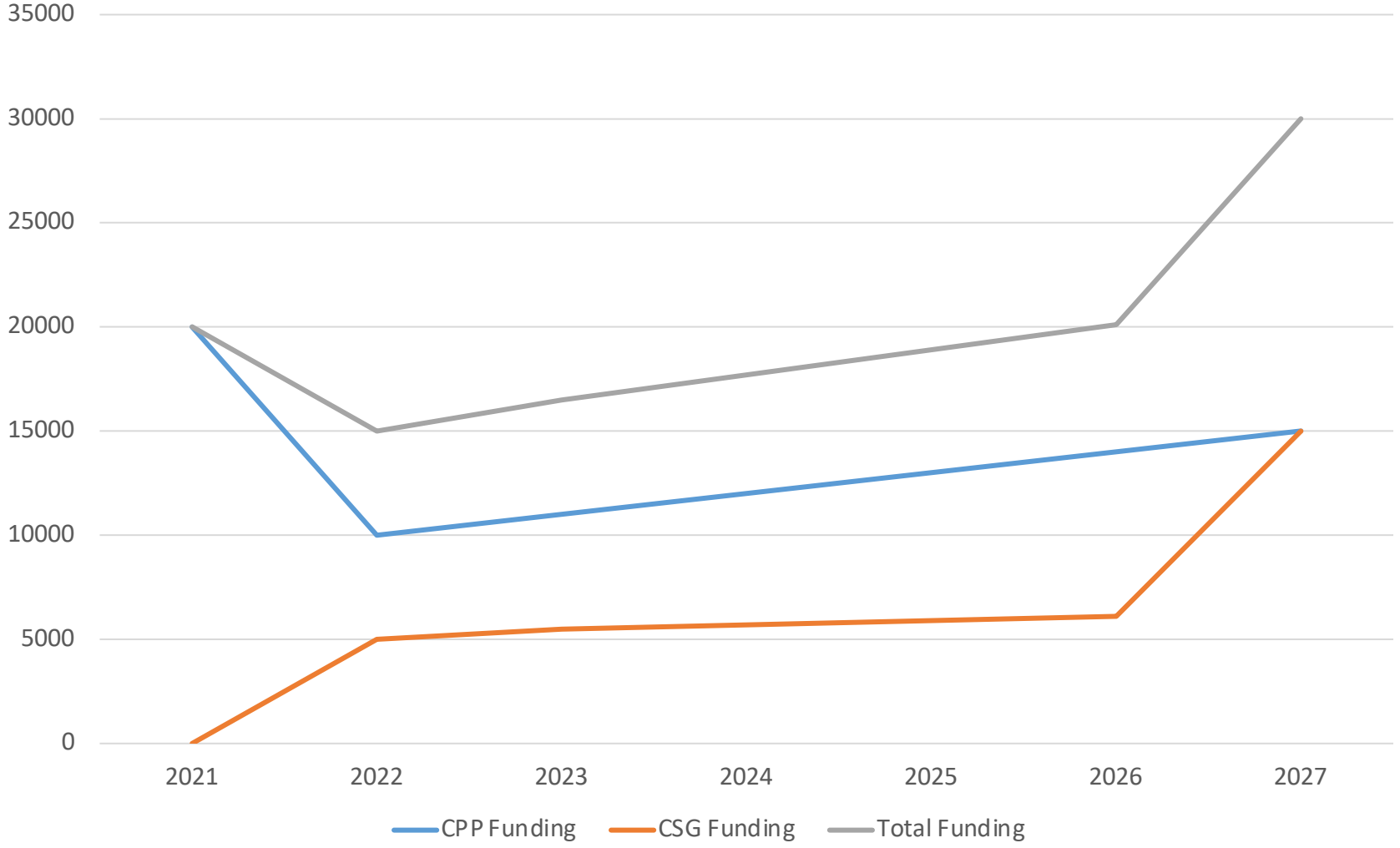
Equity and Environmental Benefits

- Job training targeted for low-income, BIPOC youth and young adults
- Broad-based STEM teaching tools for youth and adults
- CSGs can be targeted for renters, households below 80% AMI
- Supports MCA community engagement re: clean energy transition
- Solar power will reduce CO2 emissions by 28,500 tons per year
- Emissions reduction is equivalent to planting 72,857 tree seedlings
- Creates foundation for greater energy resiliency, grid stability

NEIGHBORHOOD Snapshot

- NEIGHBORHOOD Neighborhood Council NRP Balances
 - Phase 1
 - Phase 2
- Proposed NEIGHBORHOOD NRP Contribution to CSG
- Partner Neighborhood Organizations [if necessary/desired]

Neighborhood Financial Snapshot with CSG



Under-the-Hood Financial

- Total cost to install: \$1.85/watt \$40.0 million total project
 - Out-of-pocket cost to build: \$1.45/watt
 - Tax equity/charitable donation partner: 10 cents per watt
 - MCA project management/promotion: 10 cents per watt
 - REP development/construction margin and training: 20 cents per watt
- Return on NRP funds: 3% Years 1-5, 7% Years 6-25
- Enhanced tax equity financing: 75% of total project cost
- Donation of solar assets to NEIGHBORHOOD after five years

Neighborhood Resident Benefits

- NEIGHBORHOOD residents subscribing to NEIGHBORHOOD CSG
 - Free Energy Retrofit and Consultation
 - Upgrades to Home or Apartment (LED Lights, Energy Efficient Appliances, Smart Thermostat etc.)
 - Choose your level: Light retrofit, moderate retrofit, deep retrofit
 - Conversion to Electric Heat Pump Information
 - Electric Vehicle Ownership Information
 - Electric Vehicle Charging Station Information
 - Battery Back-up Resiliency Information
 - Annual Net Savings
 - Savings from Energy Retrofit
 - Net Subscription Benefit

Phase I Development: City-Wide Metrics

- 21.6 megawatts-dc of solar energy projects across the City as CSGs
- NRP investment of \$10.0 M leveraging \$30.0 M of tax equity capital
- CSG subscriptions for 3,500 households across the City (5 kW each)
- Monthly savings on utility bills for subscribers of 15-20% (\$25-30)
- Solar skills training and employment for 25 Minneapolis residents

Full Program – City-Wide Financial Benefits

- Total return on NRP funds-25 years: \$15,500,000
- Net Benefits to Households-25 years: \$10,000
- Wages and benefits of 25 solar workers-25 years: \$35,000,000

Timeline and Next Steps

- EPA funded modeling with Hawthorne neighborhood-Summer 2021
- Identify initial projects sites in multiple areas of the City-Fall 2021
- Identify initial neighborhood partners-Fall 2021
- Initial project due diligence, financing commitment-Winter 2021-22
- Recruitment and skills training of solar workers-Winter 2021-22
- Design and installation of first projects-Spring-Fall 2022
- Evaluate initial work and draft schedule for 2023-24-Winter 2022-23