Governing Solar Benefits as a Transparent, Local Common Good: The Solar Commons Dashboard



Technical Session *Building Solar in Underserved Areas: Rural, Tribal, and Other Communities;* Equity & Access Track SOLAR 2023 Conference (ASES)

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Roadmap of Talk

Building Shared-Equity Ownership: a new legal model of community solar benefiting underserved communities

Digital Dashboard Tool enabling transparent, accountable sharing of solar savings

Conclusion: how Solar Commons expands "meaningful benefits of solar"

Approaching community solar ownership as a legal anthropologist

FORMAL LAW



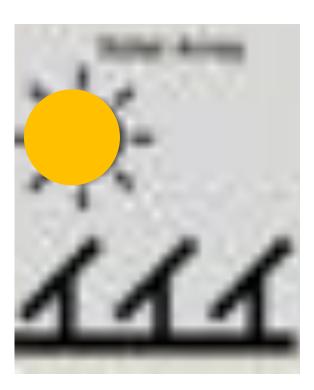
statutes, contracts, policies, regulations

INFORMAL LAW



rituals, culturally shared practices, assumptions, values

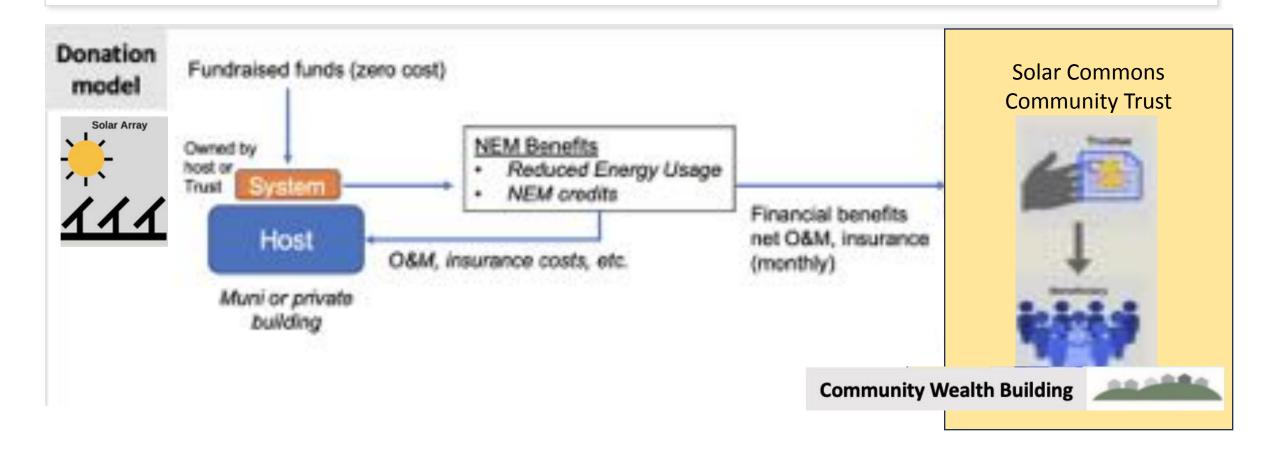
THE SOLAR COMMONS PROJECT: Use Formal and Informal Law To Shape Solar Technology Into A Tool for Sharing Equity in the Sun's Common Wealth





Formal Law + Donation (or loan)

SOLAR COMMONS COMMUNITY TRUST AGREEMENT (SCA)



All Parties to the SC Trust Agreement (SCA) are Incentivized & Receive Benefits from Solar Savings



Community partners create the 20-year trust agreement.

Purpose of the trust is set by underserved community partner.



Solar savings going to TRUST



Solar savings going to the trust are calculated at a **FIXED RATE**.

As cost of electricity goes up, the host keeps more of the solar savings.

Calculations of solar savings are done in a digital dashboard that is shared by all parties to the trust.

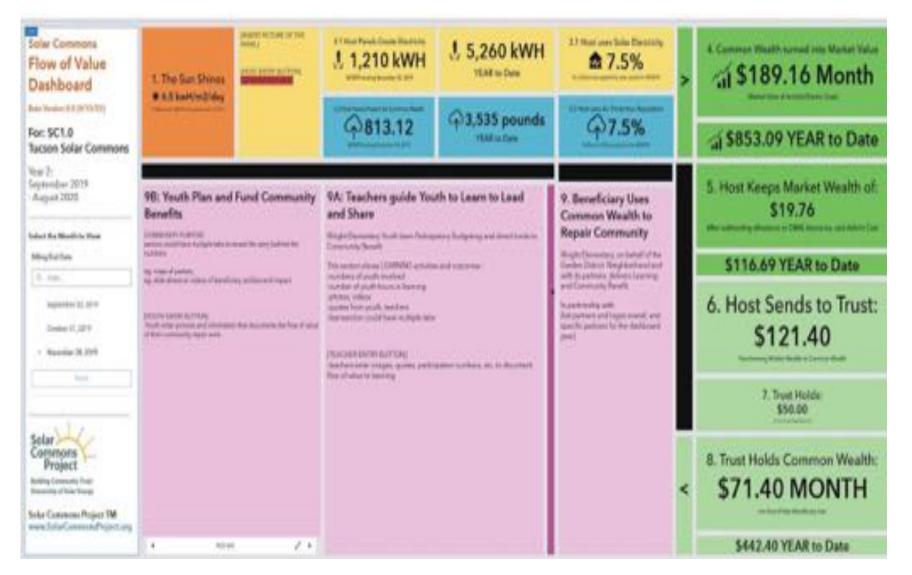
Informal Law

CREATING VISIBLE BENEFITS & OBLIGATIONS

Ritualizing monthly and annual PRACTICES

Holding Parties Accountable

SHARED GOVERNANCE FLOW OF VALUE DASHBOARD Creating Transparent, Accountable Shared Governance of the Sun's Common Wealth



SC1.0: Distributing Solar Commons trust funds in underserved neighborhoods of **TUCSON, ARIZONA**



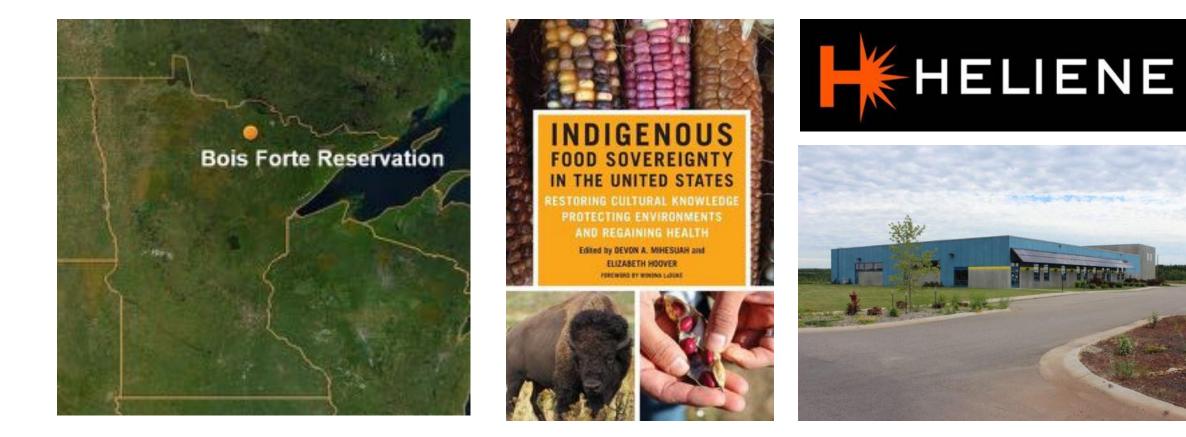
SCHOOL PARTICIPATORY BUDGETING

Growing cross-curricular civic learning in your school



SC2.0: Distributing Solar Commons trust funds in an underserved rural area of Northern Minnesota





Ritualizing Shared Solar

Equity



Solar Compone Flow of Value Dashboard Intrivient (1975/37) For: SCL0 Tacson Solar Commons	1. The Sun Shines • 6.5 haif/md/day	And Control of the	4 1,210 kWH	U 5,260 kWH TEM to Dee	1) Harrison Halles Tanatatiy ▲ 7.5%	*	al \$189.16 Month
							S853.09 YEAR to Date
Vege 2: September 2015 August 2005 Unter An Marilan Anne Mingheithen De neo. Auguster 11, 2019 Desine 11, 2019 1 November 21, 2019	98: Youth Plan and Fund Community Benefits International Applications for any following the status register of participations of the status of the status register of participations of the status of the status status of participations of the status of the status status of the status of the status of the status of the status status of the status of the status of the status of the status		Nuclear-Antin Automa Subacteria (stage, game, pering and surface, as, in document		9. Beneficiary Uses Common Waalih to Repair Community Might Issues of the Angles Issues of Status Replacements of Status Replacements of Status Replacements of Status Replacements of Status Replacements of Status Replacements Networks of Status Replacements and Status Replacements of Status Replacements Replacements of Status Replacements and Status Replacements and Status Replacements Replacements Replacements and Status Replacements Replacem		5. Host Keeps Market Wealth of \$19.76 S116.69 YEAR to Date 6. Host Sends to Trust: \$121.40
Selar Project						×	7. Trust Holds 550.00 8. Trust Holds Common Wealth: \$71.40 MONTH
Sela Canana Anjeo 1M men Sola Connected Agent og	4 100						5442.40 YEAR to Date



Solar Commons 1.0 – Tucson Living Lab COMMONS STATEMENT OF BENEFITS AND OBLIGATIONS (CSBO) To: SC Host Organization: Dunbar

From: SC Trust Protector: Solar Commons (501c3 non-profit)

Commons Year 5 - September 1, 2022 to August 31, 2023 Monthly Summary for Reporting Month Ending: 9/1/2022 Statement Date: Preliminary Draft 2/21/2023

2018 Capital Funding Investment for Solar Commons Solar Panel at Dunbar Host: \$ 86,000

This is the value of the Solar Commons Panel at Dunbar for solar panels plus installation cost.

Based on this initial investment and the Solar Commons Agreement (SCA), Dunbar, as Solar Commons Host, has the following benefits and obligations, summarized for the month.

2100 kWH	Solar Production (CYS estimated) Protected Air Common Wealth (prevented C02e emissions)				
1411.2 Pounds CO2e					
6.4%	Solar Percent of Total Electric Use				
6.4%	Host's Commons Air Protection as a Percentage of avoided emissions from electricity				
\$404.47	Market Value of Solar Common Wealth (Gross before expenses and obligations)				
\$48.00 \$17.00 \$21.00 \$10.00	Total Monthly Host Expense Allowance Portion for O&M Portion for Solar Panel Insurance Portion for Admin Cost				
\$110.47	Host Cash Benefit from Solar Commons				
\$246.00	Host's Commons Obligation to Trust				

Dunbar Obligated Actions

- Pay monthly portion to Trust: Remit \$246.00 to Trust at address
- Pay insurance on panels and confirm insurance on panels is in tact
- Upload current insurance rider (annually or when changes occur)

Dunbar Recommended Actions

- Maintain O&M fund reserve
- Distribute Dunbar Cash benefit to use or fund of choosing
- Communicate the story of your participation in annual report and social media (offer post-able/tweetable suggestions)

Conclusion: Expanding Meaningful Benefits of Solar with Shared-Equity (Solar Commons) Ownership

SC BENEFICIARIES SHOWCASE THEIR DEED TO EQUITABLE TITLE OF THE SUN'S COMMON WEALTH THROUGH PUBLIC ART

