

# RENEWABLE ENERGY ALLIANCE

A NATIONAL THOUGHT LEADER ON ENERGY ACCESS

# THE POWER TO MAKE A DIFFERENCE

Community Solar for Community Action
NACo Conference
Erica Bjelland, RREAL

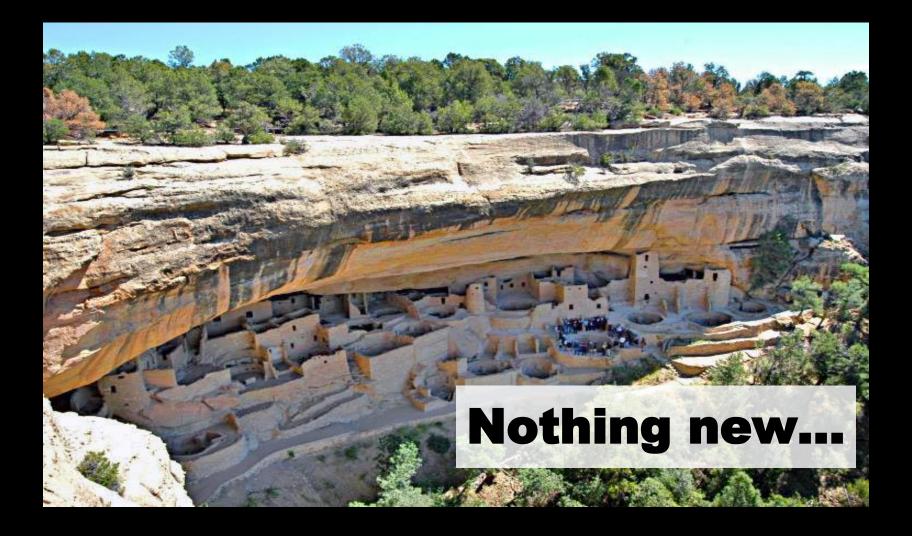


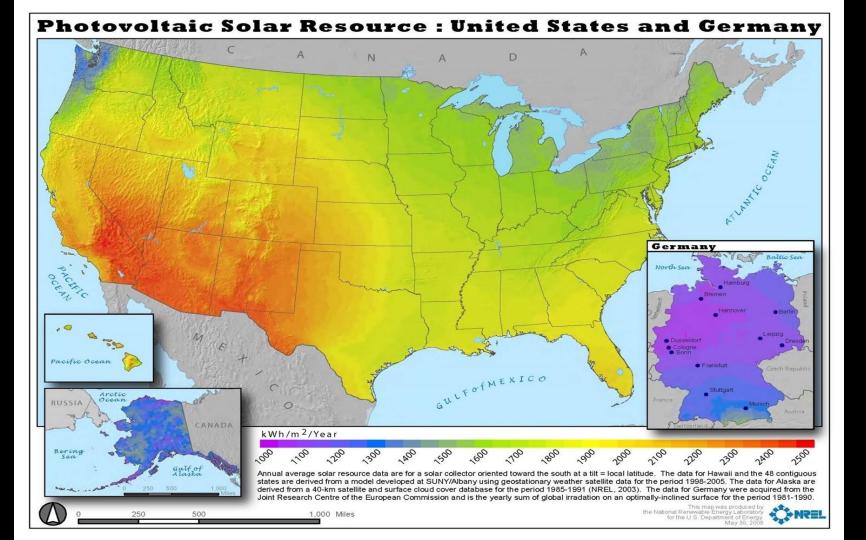
### WEALTHWORKS

Connecting community assets to market demand to build lasting livelihoods.









# 67 gigawatts

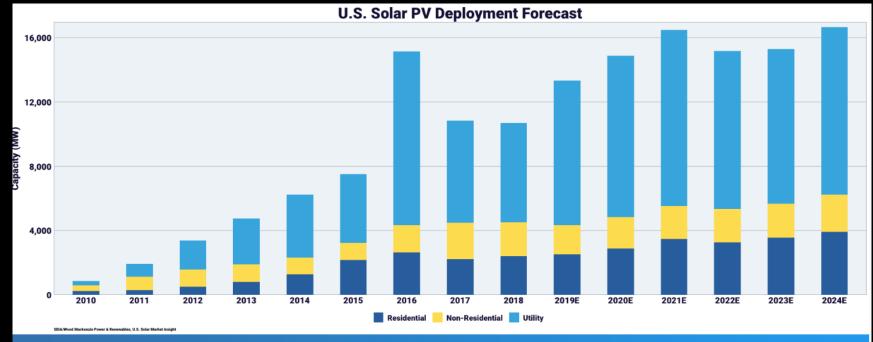
of solar has been installed in the US through 2019

# 12.7 million homes

# 1,387 megawatts

of community solar have been installed in the U.S. through 2018

**227,468** homes

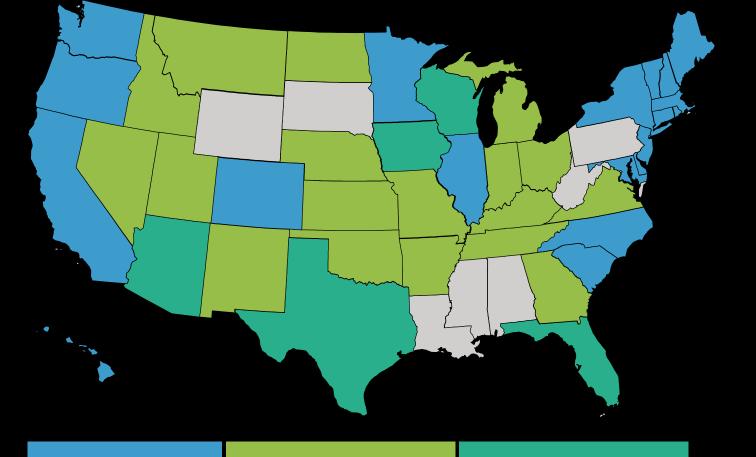












Policy-Enabled Market

One-Off Programs (1-5)

One-Off Programs (5+)

## **Community Solar Model**



### **Financer and Developer**

These entities work together to form the community solar project.
Funding can come from investors, utilities, or other streams of revenue.

### **Solar Array**

The solar array is then built at shared space that has a good solar resource.

### **Utility Customer**

Households pay and subscribe to a solar array.

#### **Beneficiaries**

Solar savings are dispersed on energy bills to customers.



MAILING ADDRESS	ACCOUNT N	ACCOUNT NUMBER	
Customer A 1234 MAIN ST MINNEAPOLIS, MN 55555-5555	51-55555	51-555555-5	
	STATEMENT NUMBER	STATEMENT DATE	CREDIT AMOUNT
	44444444	05/27/2014	-\$588.47 CR

SERVICE ADDRESS: TANKS

1234 MAIN ST MINNEAPOLIS MN 55555-5555

NEXT READ DATE: 05/13/14

#### **ELECTRICITY SERVICE DETAILS**

PREMISES NUMBER: 333333333 INVOICE NUMBER: 454545454

METER READING INFORMATION					
METER 1111111 - Multiplier x 40	Read Dates: 0			03/12/14 - 04/12/14 (31 Days)	
			MEASURED	BILLED	
DESCRIPTION	CURRENT READING	PREVIOUS READING	USAGE	USAGE	
Total Energy	15600 Actual	15539 Actual	61	2440 kWh	
On Pk Energy	669 Actual	667 Actual	2	80 kWh	
Off Pk Energy	14931 Actual	14872 Actual	59	2360 kWh	

**ELECTRICITY CHARGES** RATE: Limited Off-Pk Srvc DESCRIPTION USAGE UNITS RATE CHARGE Basic Service Chg \$13.60 \$55.93 Off Peak Energy Chg 2360 kWh \$0.023700 On-Peak Energy Chg 80 kWh \$0.260000 \$20.80 Fuel Cost Charge 2440 kWh \$82.76 \$0.033918 Resource Adjustment \$10.79 Interim Rate Adj \$5.97 \$189.85 Subtotal City Fees \$3.00

#### OTHER RECURRING CHARGES DETAILS

DESCRIPTION CHARGE
Solar\*Rewards Community Solar

Production Credit

Total

Total

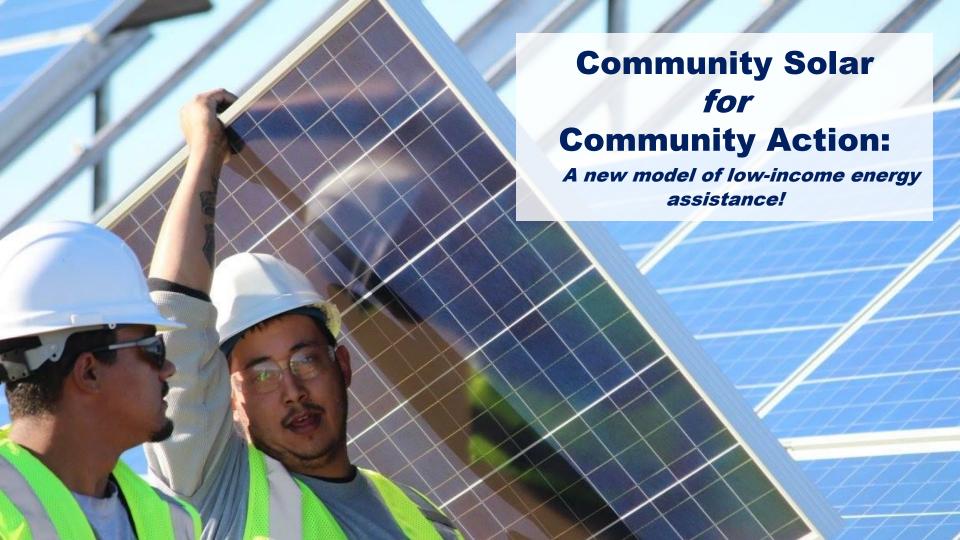
Solar Production Period SRC700040 Production Credit 1559.9 kWh x -0.117830 February 2014

- \$183.80 CR - \$183.80 CP

\$192.85











Obituaries

E-edition

Celebrate

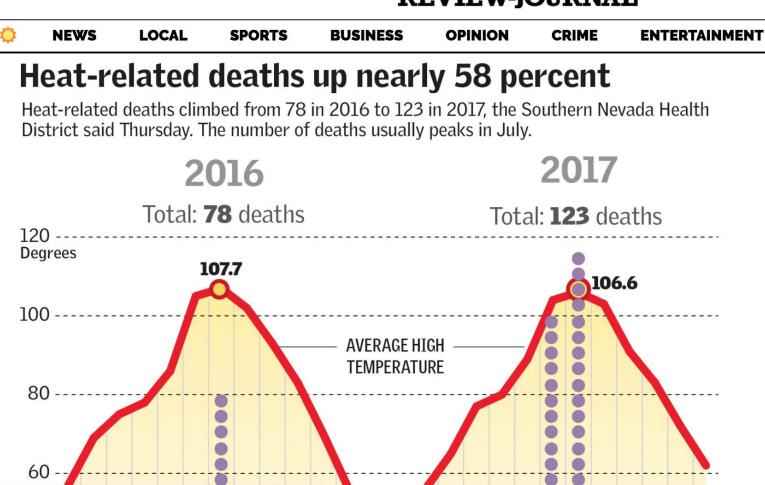
Buy & Sell

-<u>න</u>්: 69°

# Hypothermia ruled cause of reservation death



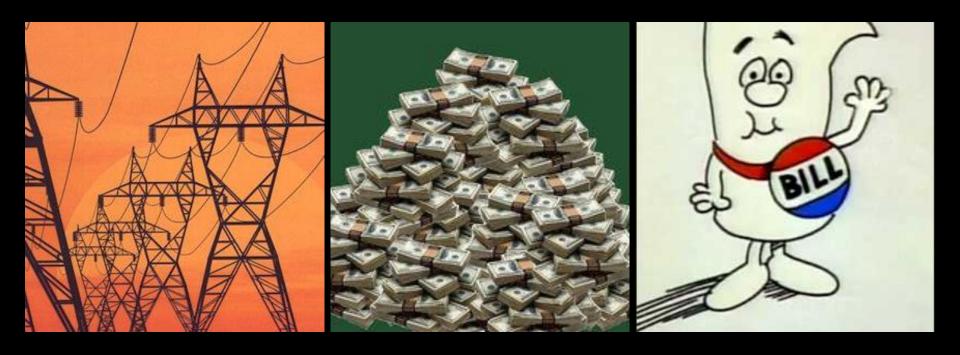
#### LAS VEGAS REVIEW-JOURNAL





\$100 million Annually in MN Minnesota

# \$ 5 billion Annually Nationwide



# Limitations









Serving 96% of counties in U.S.



# Community Solar for Community Action Model



#### **Financer and Developer**

These entities work together to form the community solar project. Funding can come from Community Action Agencies, grants, and/or investors.

### **Solar Array**

The solar array is then built at a Community Action Agency or community shared space that has a good solar resource.

### **Community Action Agency**

The Community Action
Agency helps identify
households that could
benefit from a solar energy
credit on their energy bill.

### **Beneficiaries**

Solar savings are dispersed to households identified by the Community Action Agency.

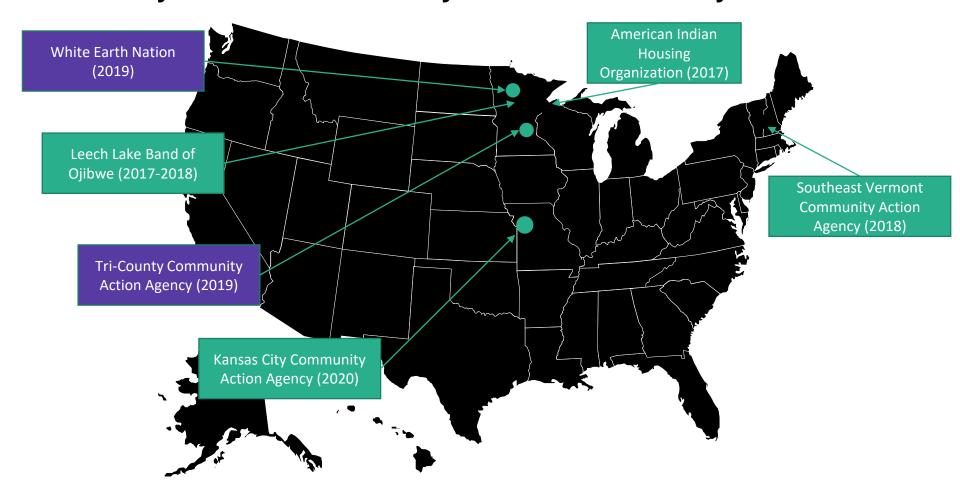


## **Workforce Development in MN**





### Community Solar for Community Action: A Nationally Scalable Model







## Community Solar

Successes from around the country

NACo Annual Conference - 2019 Clark County, NV

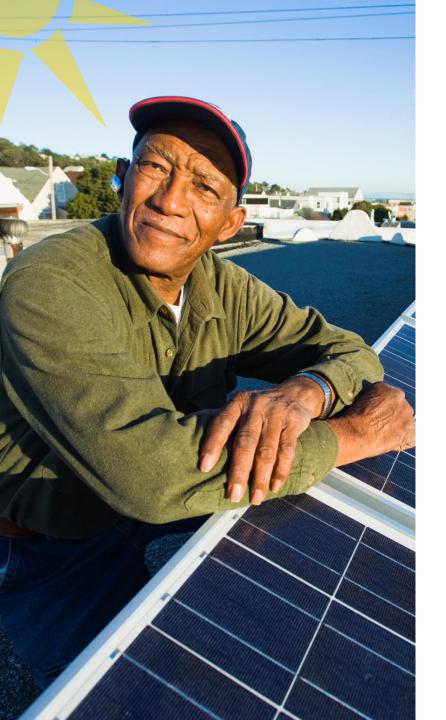
Michael Whalen Senior Project Developer July, 2019

People. Planet. Employment.



### AGENDA

- GRID Alternatives
- Community Solar Overview
- How can Counties partner with Developers?
- How do Counties benefit from Community Solar?
- Past Projects



### **Our Mission**

### WE MAKE RENEWABLE ENERGY TECHNOLOGY AND JOB TRAINING ACCESSIBLE TO UNDERSERVED COMMUNITIES.

- Direct solar project development & technical assistance
- Workforce development
- Low-income solar policy leadership



### **Our Impact**

### GRID IS MAKING A DIFFERENCE.

- 11,140 families served, 48 MW, \$336M in lifetime savings
- 1,500 direct job placements and participation in national workforce partnerships
- Industry partnerships promoting STEM education in high schools and workforce diversity

GRID's Key Programs & Initiatives









## Community Solar Overview

What is community solar, where are there opportunities for it, and who can get involved?

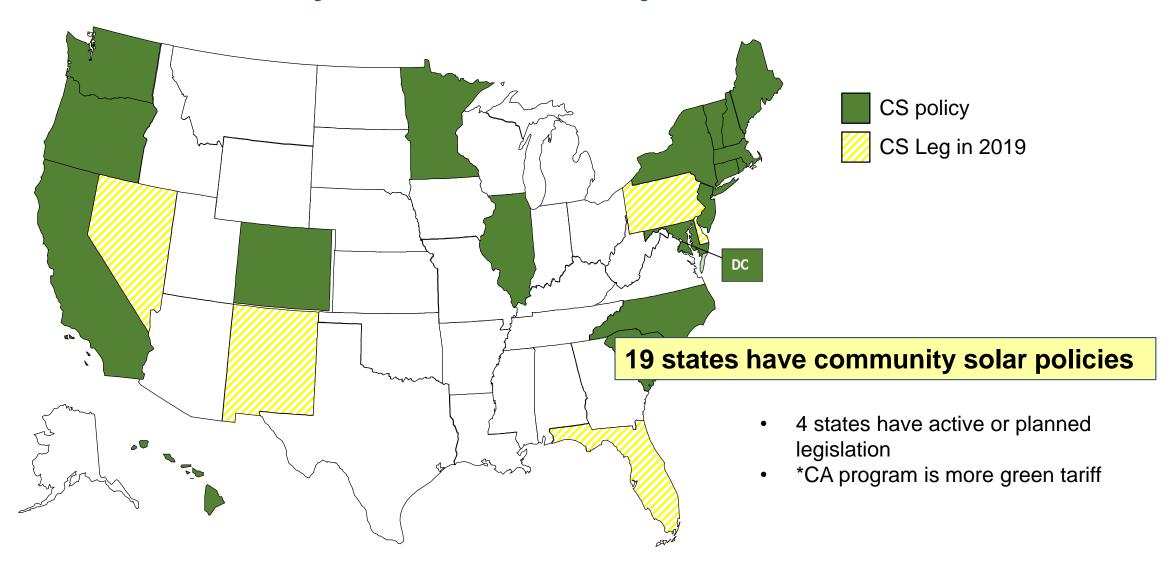
# Community Solar



## Leading developer of low-income community solar projects

- GRID provides turnkey community solar
  - Projects serving low-income customers, affordable housing, anchor subscribers
- Colorado
  - 5.1 MW installed, 8.5 MW pipeline (IOU, Coop)
- Mid-Atlantic
  - 3.7 MW under development (city brownfield, affordable housing rooftop)
- California
  - 2 MW of low-income dedicated projects under development (Coop, CCA)
- Active in regulatory / policy in 7 states

### Community Solar Policy



#### County Partnerships with Developers



Successful community solar projects require dedication and cooperation from several stakeholders, including state regulators/legislators, utilities, landowners, residents, and perhaps most importantly, **County staff** and **elected officials**.

If your community is interested in partnering with Developers, there are a number of ways you can help:

- 1. Providing assistance with locating potential sites for projects, including brownfields and those on municipal land
- 2. Laying out transparent and forward-thinking permitting procedures, including educating Staff and elected officials on solar energy, adopting solar-specific ordinances that provide a path to successful permit issuance, etc.
- 3. Reach out to GRID Alternatives or other developers to start a conversation! An open line of communication may be the best way to fuel partnerships!

- 1. Added **tax revenue** both from personal property tax payments on equipment and potential increases in real property taxes (varies by jurisdiction and state)
- 2. They provide workforce development opportunities mean a better trained workforce and the potential for increased economic investment in the community.
- 3. Your constituents want more solar access: 89% of American adults are in favor of more solar farms (Pew Research Center)
- 4. Solar farms are **low impact** but have far reaching benefits: they emit no noise, odor, or light; they do not require municipal services such as water, sewer, or trash; they do not burden school systems or generate substantial long-term traffic

## How does Community Solar benefit Counties?





GRID is expanding workforce training through Community Solar

#### Solar Workforce Training

- Workforce training through GRID Colorado Solar Training Academy
- 48 hour 2 week course with hands on and classroom training, in partnership with Denver Housing Authority
  - SEI PV100, OSHA 10, GRID installation Basics Training certificates, other transferrable skills
- Employment opportunities following completion
  - Solar installer positions with GRID partner employers
  - GRID internships & fellowships







## Past Projects

GRID's Community Solar Projects



Poudre Valley Rural Electric Association (Coop) – 1.95 MW

#### **PVREA Project Overview**

- 1.95 MW DC tracker, Landfill sited
- Mixed offtaker
  - 700 kW LMI
  - 500 KW nonprofit / affordable housing
  - 750 kW 'general'
- On-bill crediting and payment
- Workforce & volunteer component
- Competing in DOE Solar in Your Community Challenge
- 2018 SEPA Power Player award

"This project allows PVREA to be able to offer a solar subscription to any member, regardless of income level or location"

-Jeff Wadsworth, President & CEO, PVREA



#### Black Hills

- 2.5 MW DC awarded through Black Hills' 2018 RFP
- Financial structure with Pueblo housing authority & City of Pueblo
- Mixed offtaker
  - 40% City and local partners
  - 60% LMI / affordable housing
- GRID will lead solar workforce training for 30 individuals throughout the course of the project



### Case Study - PVREA

- 1.95 MW DC, Landfill sited
- Lead installer: GRID
- AC Sub: Circuitous Energy Solutions
- Commissioned: Sept. 2017
- GRID's community participation and workforce development model
- Mixed offtaker
  - 700 kW LMI
  - 500 KW nonprofit / affordable housing
  - 750 kW 'general'
- Financing through CoBank

"This project allows PVREA to be able to offer a solar subscription to any member, regardless of income level or location"

-Jeff Wadsworth, President & CEO, PVREA





People. Planet. Employment.

#### **Michael Whalen**

Senior Project Developer

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