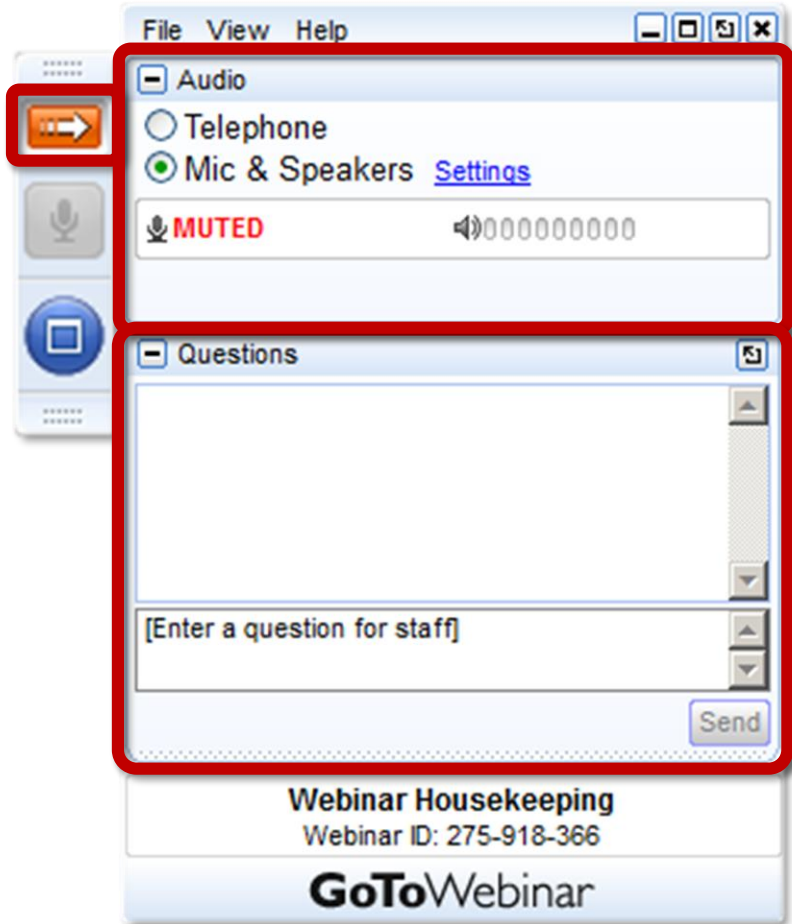


# States' Strategies for Working with Low-Income Community Groups on Solar

September 25, 2019

# Housekeeping



Join audio:

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- Choose Telephone and dial using the information provided

Use the orange arrow to open and close your control panel

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# CleanEnergy States Alliance



ALASKA ENERGY AUTHORITY



Wisconsin Office of Energy Innovation



NYSERDA



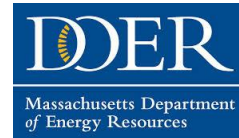
MICHIGAN Energy Office



Maryland Energy Administration



Department of Commerce Innovation is in our nature.



Alaska Center for Energy and Power

# State Energy Strategies



- Funded by the U.S. Department of Energy through the Solar Energy Technologies Office.
- The Clean Energy States Alliance is working with CT, DC, MN, NM, OR and RI to make solar more accessible to low- and moderate-income residents.



- Research support provided by Lawrence Berkeley National Laboratory and the National Renewable Energy Laboratory.



# Webinar Speakers



**Shauna Beland**

Chief – Program  
Development, Rhode  
Island Office of Energy  
Resources



**Betsy Kauffman**

Renewable Energy  
Sector Lead, Energy  
Trust of Oregon



**Nicole Hernandez-  
Hammer**

Project Director, Clean  
Energy States Alliance  
(moderator)



# Thank you for attending our webinar

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# Upcoming Webinars

## **FERC 841 Compliance Update**

Tuesday, October 1, 3-4pm ET

## **Messaging Research on Public Perceptions of the US Electric Grid (CESA Members Only)**

Tuesday, October 8, 1-2pm ET

## **Replacing Power Plants with Low-Income Residential Solar+Storage**

Thursday, October 10, 1-2pm ET

Read more and register at [www.cesa.org/webinars](http://www.cesa.org/webinars)



# R.I. OFFICE OF ENERGY RESOURCES

## Community Solar:

Making renewable energy  
accessible to all Rhode Islanders

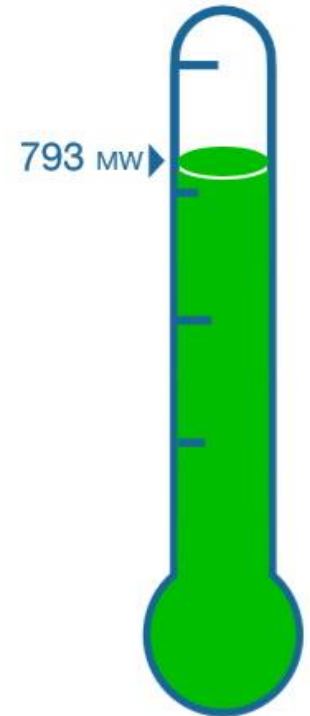


**2019  
Qtr. 2**

# Clean Energy Portfolio

**1,000 MW**  
by 2020

## 793 Megawatts



11 MW



Small Hydro

35 MW



Landfill Gas /  
Anaerobic  
Digestion

144 MW



Onshore Wind

173 MW



Solar

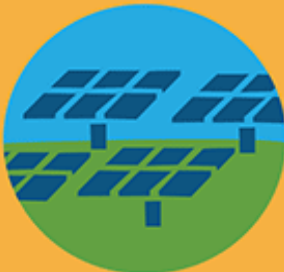
430 MW



Offshore Wind

# Saving money with community solar & Virtual Net Metering (VNM)

Community solar plant produces electricity



Electricity that is produced becomes Net Metering Credits



Credits are added to your electric bill



Image Credit: Energy Sage



# 1<sup>st</sup> Community Solar Project in Rhode Island

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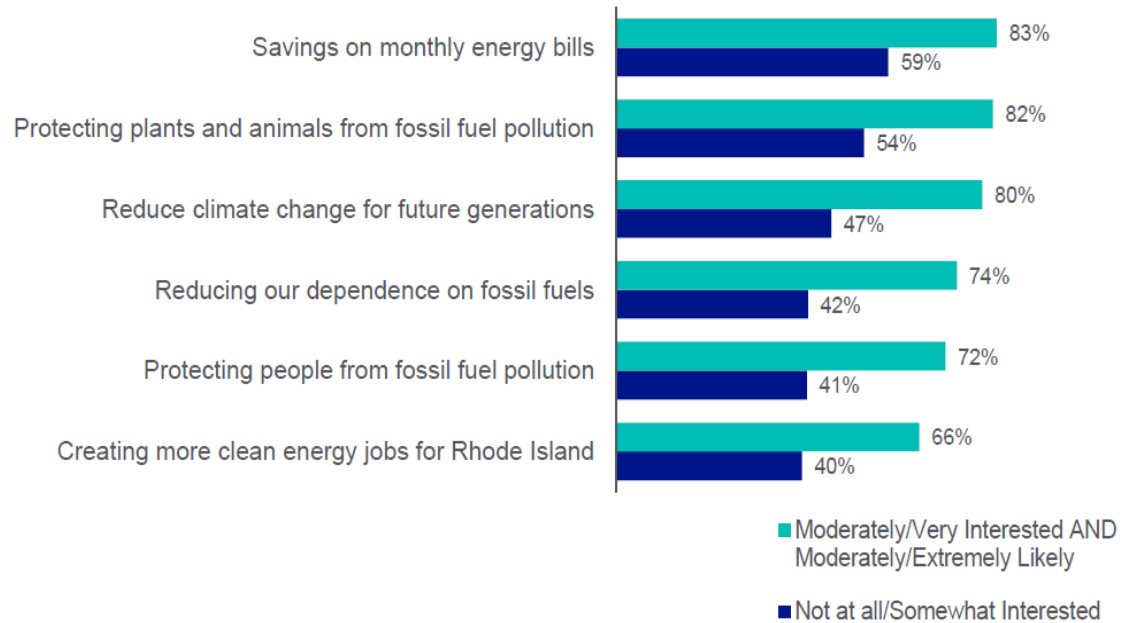




**Meetings with Solar Developers and Subscriber Management Companies**

# Energy bill savings is the most important benefit of participating in community solar, but environmental benefits are also important for those most interested

## Community solar benefits (%Extremely Important)

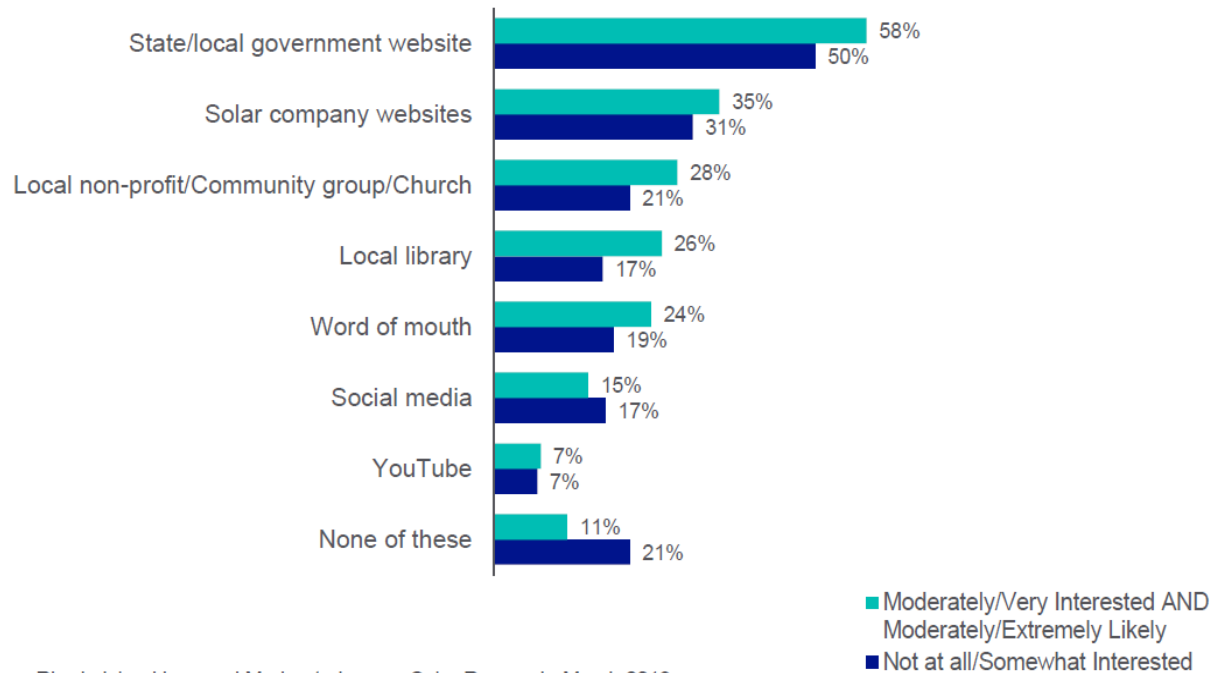


Source: Rhode Island Low and Moderate Income Solar Research, March 2019

Note: Q9 As you feel they are important to you, please rate the following benefits of participating in a community solar project. %Extremely Important  
Cut by interest in community solar in Q5 and Likely to participate in Q6; Base=122 (Interested & Likely); 240 (Not at all/Somewhat interested)

# State/local government website is the most trusted source for information about community solar

## Most trusted sources about community solar



Source: Rhode Island Low and Moderate Income Solar Research, March 2019

Note: Q10 If you were to search for information about clean energy, which of the following do you trust most as a source for that information? (Select up to 3)

Cut by interest in community solar in Q5 and Likely to participate in Q6; Base=122 (Interested & Likely); 240 (Not at all/Somewhat interested)

# Coming Soon – RI Community Solar Marketplace

[www.RIsolarmarketplace.com](http://www.RIsolarmarketplace.com)







SUSTAIN**PVD**



# Coming soon to Rhode Island

## Community Solar

### Saving money with community solar & Virtual Net Metering (VNM)

Community solar plant produces electricity



Electricity that is produced becomes Net Metering Credits



Credits are added to your electric bill



Image Credit: Energy Sage

### What is community solar?

A community solar project is a large solar farm shared by more than one household.

Its primary purpose is to allow members of a community the opportunity to share the benefits of solar power even if they cannot install solar panels on their property.

Project participants benefit from the electricity generated by the community solar farm, which costs less than the price they would ordinarily pay for electricity.

Through community solar programs, renters, home-owners, municipalities and non-profits can participate in clean energy projects and save money on their monthly electricity

### Community Solar At-A-Glance

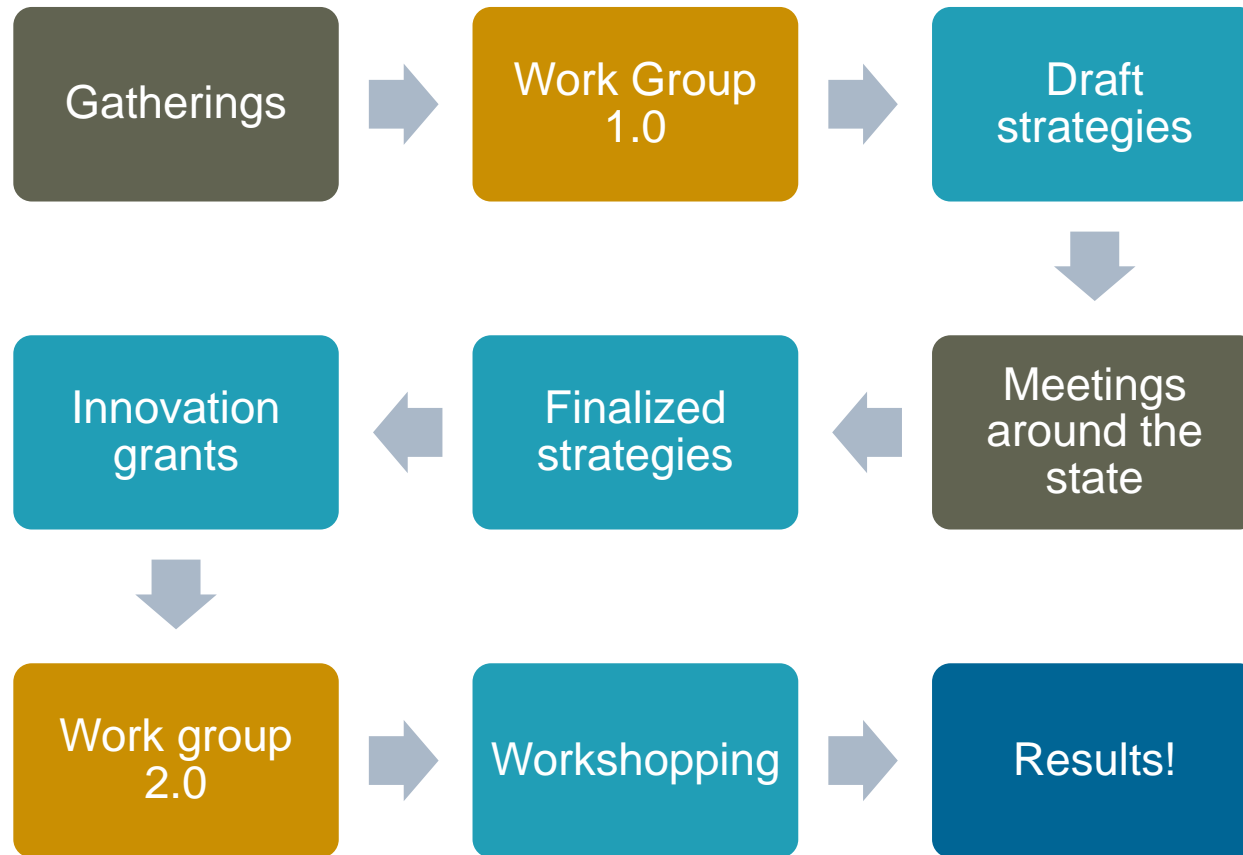
- In 2019, for the first time, Rhode Island will have community solar projects available for a limited number of customers to subscribe.
- Everyone can benefit from solar energy.
- New state initiatives and programs now make it possible for renters to benefit from solar energy too.
- Save money on your monthly electric bill and contribute to cleaner air in Rhode Island.
- This summer the Rhode Island Office of Energy Resources is launching a community solar marketplace website.
- Stay tuned for more information at: <http://www.energy.ri.gov/>



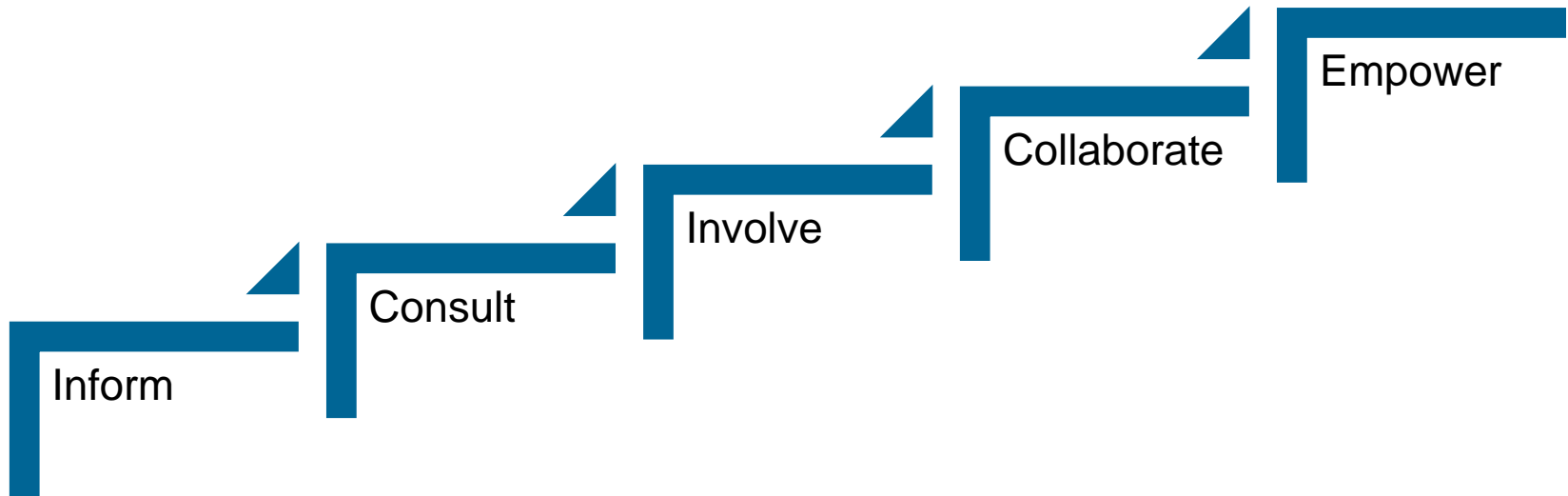
# LMI Solar Outreach in Oregon

September 25, 2019

# Our process over the past three years



# Spectrum of Public Participation



*International Association of Public Participation*

# 2017 gatherings

- Events in four communities across Oregon
- Presentations and listening sessions
  - 140+ attendees
- Small group discussions, meal
- What we got:
  - Local values
  - Early LMI principles
  - Distribution list!
  - Interested people





## LMI Solar Work Group 1.0

- Enlisted a core stakeholder workgroup
- Charged with investigating barriers, opportunities and solutions
- Participatory planning activities
- At first, typical set of energy stakeholders



# LMI Solar Work Group 1.0

## **Energy organizations**

- Bonneville Environmental Foundation
- Citizen's Utility Board
- Community Energy Project
- Douglas County Smart Energy
- Northwest Energy Coalition
- Oregon Solar Energy Industries Association
- Spark Northwest
- Sustainable Northwest
- 350 Deschutes

## **Government agencies**

- Multnomah County – Office of Sustainability
- Oregon Department of Energy

## **Utilities**

- Pacific Power
- Portland General Electric

## **Pre-apprenticeship Training Programs**

- Constructing Hope

## **Housing/LMI agencies and organizations**

- Community Action Partnership of Oregon

## **Communities of Color**

- Native American Youth & Family
- Verde

## **Community Development Corporations**

- REACH CDC

# 30+ meetings in nine communities



## Road trip meetings

- Energy organizations
- Communities of color
- Tribal governments
- County and local agencies
- Solar installers
- CAP agencies
- Housing authorities

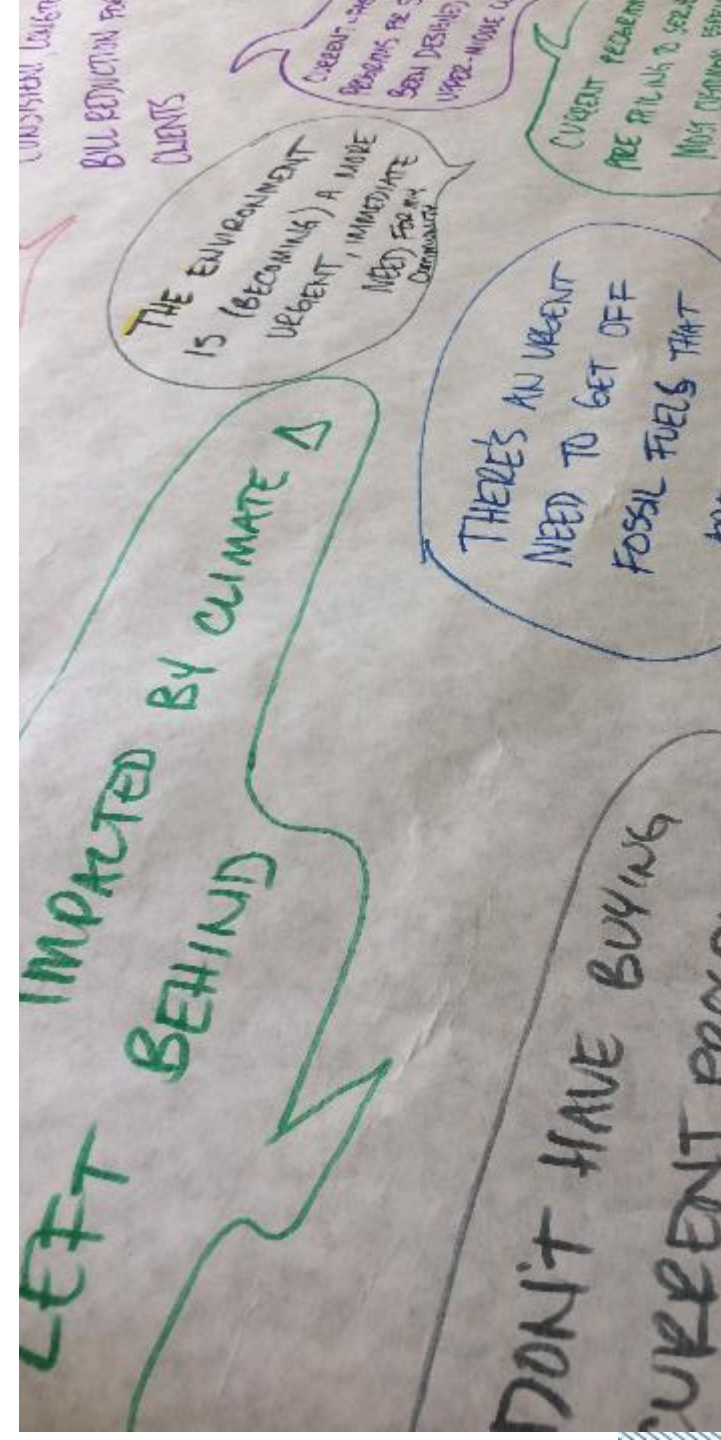
Result: We revised and finalized our strategies

# LMI Solar Work Group 2.0

- (10) \$3,000 scholarships to support participation
- Focused on underrepresented groups
- Six half-day meetings

*“It’s essential to value the time and expertise of LMI-serving agencies – no different from any other consultant – as often renewables falls outside of the core mission for most of these organizations.”*

*–Work Group 2017-2018 member*



# Work Group 2.0

## **Communities of Color**

- Lower Columbia Hispanic Council
- African American Alliance for Homeownership
- NAACP
- Verde
- Centro Cultural
- Native American Youth & Family

## **Affordable Housing Providers/ Authorities**

- Portland Community Reinvestment Initiative

## **Community Action Agencies**

- Community Action Partnership of Oregon
- NeighborImpact

## **Community Development Corporations**

- CH CDC
- Umpqua Community Development

## **LMI Non-profits**

- Habitat for Humanity

## **Pre-apprenticeship Training Programs**

- Constructing Hope

# Meeting Topics

- LMI Housing Types
- Solar 101 and finance
- “Co-benefits”
  - Housing affordability, stability
  - Community resilience and energy planning
  - Workforce
- Real-world solutions - *charette*



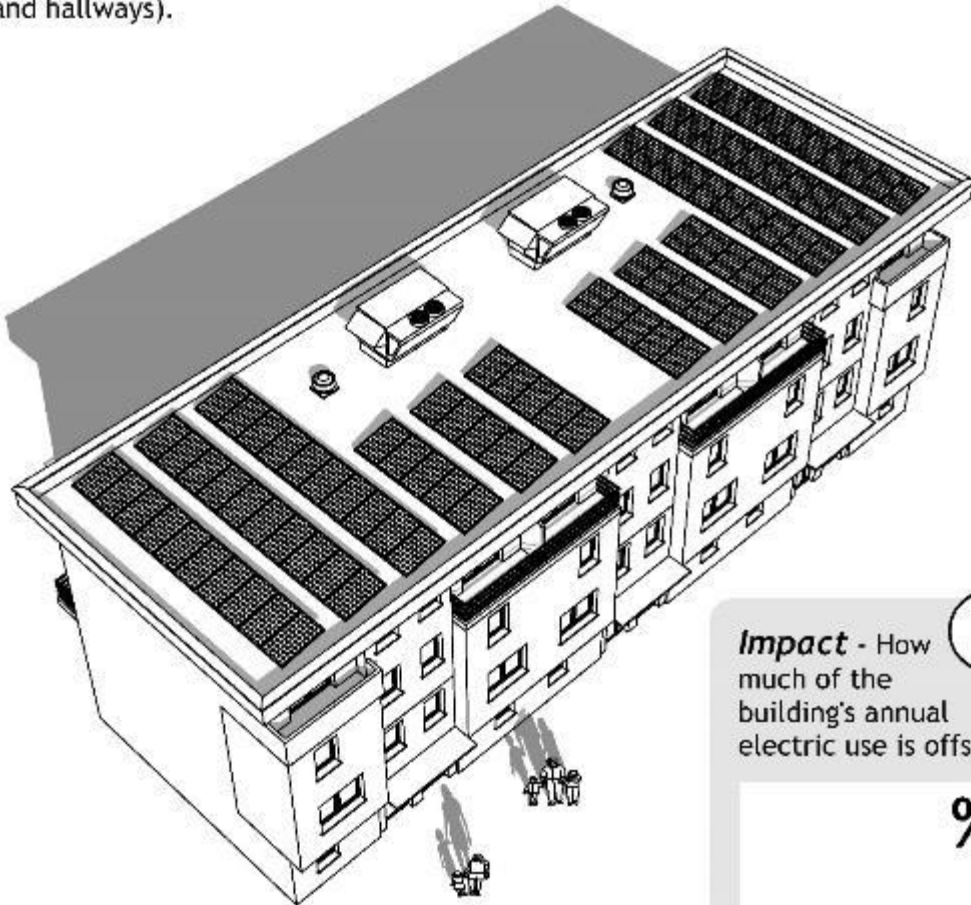
“There’s not a solar crisis, there’s a housing crisis”

Carolina Iraheta-Gonzales - Community Energy Advocate, Verde

# We put the “work” in work group...

## Multi Family Housing

This property consumes **58,000 kWh** of electricity per year (10 master-metered tenants using 5,000 kWh/yr, plus 8,000 kWh/yr for common areas and hallways).



**Capacity** - How big is it?

1

$$\frac{\text{ }}{(\# \text{ of panels})} \times \begin{matrix} \text{300} \\ \text{watts} \\ \text{each} \end{matrix} = \frac{\text{ }}{(\text{watts})} \text{ or } \frac{\text{ }}{(\text{kW})}$$

**Cost** - What's total installed cost?

2

$$\frac{\text{ }}{(\text{watts})} \times \frac{\text{ }}{(\$/\text{watt})} = \$ \text{ }$$

*\*Energy Trust offers incentives to help bring these costs down!*

**Generation** - How much energy will this system generate per year?

3

$$\frac{\text{ }}{(\text{watts})} \times \frac{\text{ }}{(\text{LPC})} = \frac{\text{ }}{(\text{kWh}/\text{yr})}$$

**Impact** - How much of the building's annual electric use is offset?

!

%

4

$$\frac{\text{ }}{(\text{kWh}/\text{yr})} \times \frac{\text{ }}{(\$/\text{kWh})} = \$ \frac{\text{ }}{(\text{per year!})}$$



# Innovation Grants

- Seeding innovative models championed by local partners
- \$81,600 in small grant funding awarded to nine selected community groups
- Blend of delivery models (rooftop, multifamily, community solar)
- Continued support for replicable models



# Innovation grant example 1



Putting solar on the roof of a community building at a manufactured home park owned by the nonprofit NeighborWorks Umpqua. Benefits shared with tenants with high energy burdens.

# Innovation grant example 2



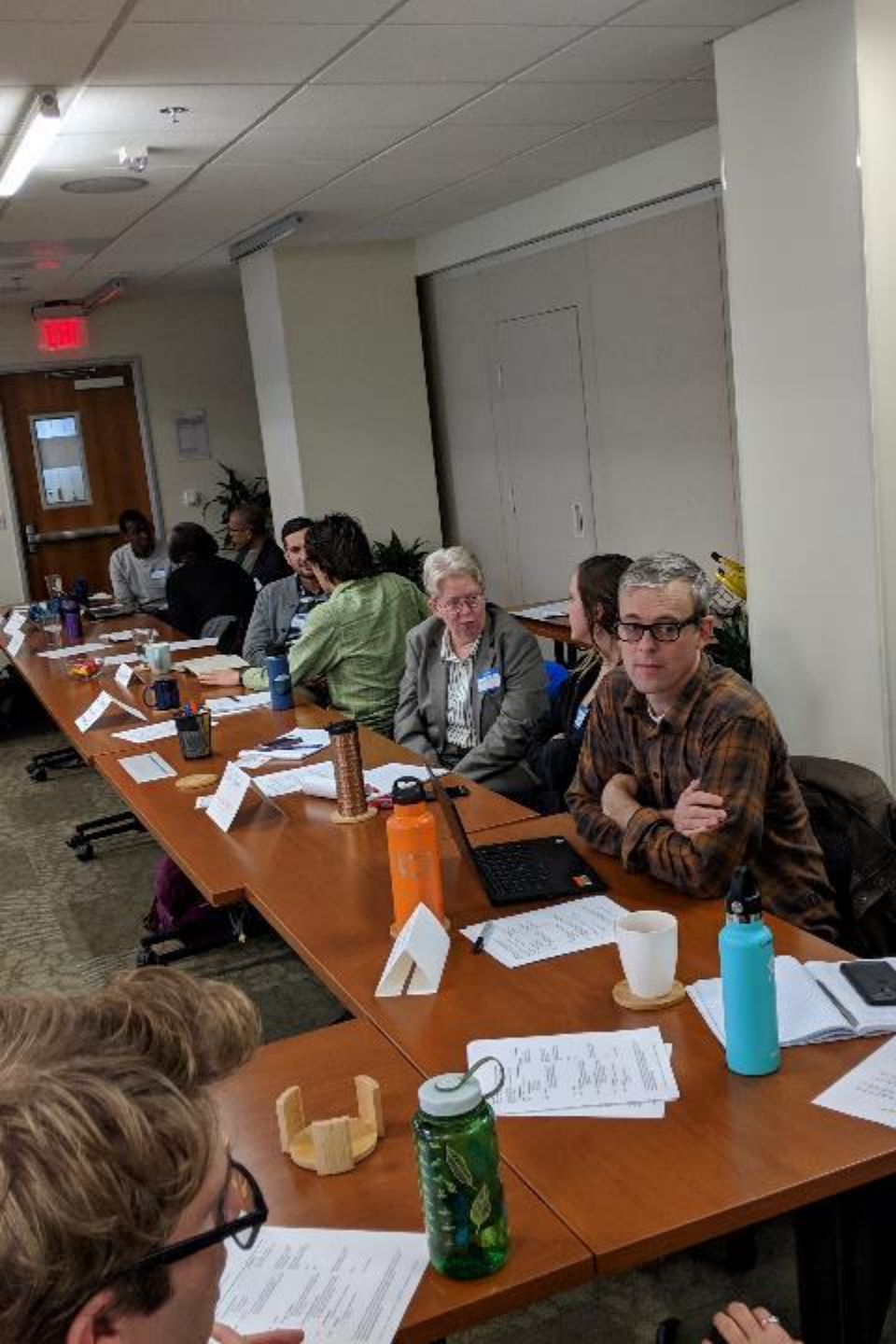
Adding solar education to existing 8-hour, HUD-approved Homebuyer Education Classes.

Exploring use of Individual Development Accounts as a way for current homeowners to save money for post-purchase solar installation.

# Innovation grant example 3



Putting solar on 20 Habitat for Humanity homes. The Cooperative monetizes the federal tax credit. Zero-interest loans provided by people in the community.



# Lessons learned

- 1) Deep and meaningful engagement
  - Hit the road!
  - Personalized recruitment
- 2) Empower Participation
  - Scholarships
  - Keep it relevant
  - Participatory planning



## Lessons learned

- 3) Listen! And revise your plans
  - Your ideas may need to be changed or dropped
  
- 4) Support local innovation
  - Planning grants
  - Continued support, ongoing relationship building



# Thank you!

Betsy Kauffman

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