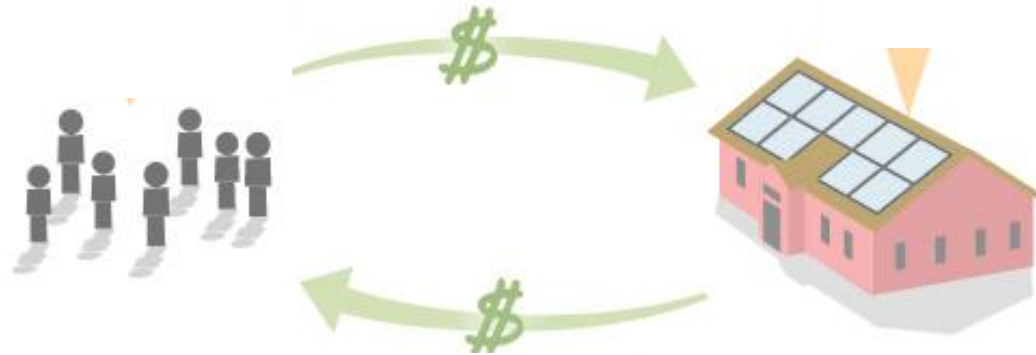


# What is Community Solar?



Community solar allows utilities, developers and non energy systems where each subscriber receives their portion of the benefit based on their level of investment and the output of the system. The actual generation of renewable energy does not occur at the home or business, but at an optimally located site. The best projects are structured so that the investment is a hedge against future energy cost increases (benefits increase with inflating electricity costs).

Many current utility based solar promotion programs simply solicit extra investment from utility customers who pay a premium to support future solar development for the utility. It is simply a donation to encourage solar development. This is not Community Solar.

# Why Community Solar ?

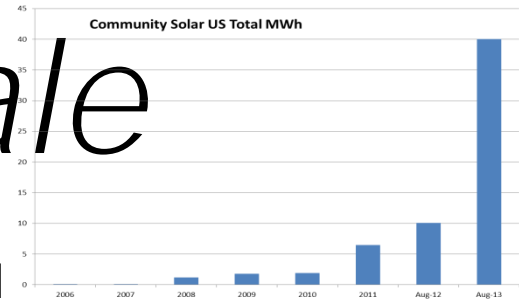
DOE estimates less than 30% homes and businesses in the US have access

I want to benefit from renewable energy generation

- " I rent my apartment, or business location
- " I live in a multi-tenant building (a condo or homeowners assoc.)
- " I have problematic roof for yard space (too shady, too small)
- " @ . . . . .
- " I am not interested in owning on-site generation (maintenance responsibility, aesthetic issues), etc

# Shared and Community Solar *Getting to Scale*

DOE SunShot Workshop, October 21, 2013 Chicago, Ill



## Shared and Community Solar: Getting to Scale

8:15 a.m. to 5 p.m. | October 21, 2013 | Chicago, IL

In this workshop, attendees will discuss systematic approaches to help enable shared and community solar systems grow rapidly beyond the approximately 50 MW deployed today.

### Conference Presenters

DOE SunShot Staff  
 Excel Energy  
 Clean Energy Collective  
 MOSAIC  
 APA  
 IREC  
 SMUD  
 Solar Gardens Institute  
 Community Power Network  
 Nat Rural Electric Cooperative  
 Vote Solar Initiative  
 SmartPower  
 First Energy Finance  
 Clean Power Finance  
 Cutting Edge Capital  
 Solar One

7:45 a.m.	Workshop registration
8:15	<b>Welcome and workshop overview</b> Anna Brockway, SunShot Science and Technology Policy Jr. Fellow
8:20	<b>Opening Remarks: Overview of the SunShot Grand Challenge</b> Elaine Ulrich, DOE Solar Energy Technologies Office
8:30	<b>Opening Remarks: Why Shared Solar?</b> Anna Brockway, SunShot Science and Technology Policy Jr. Fellow
8:45	<b>Opening Remarks &amp; Discussion: Guiding Principles for Shared Solar</b> Hannah Masterjohn, The Vote Solar Initiative Joe Wiedman, Interstate Renewable Energy Council
9:15	Coffee break
9:30	<b>Lightning Talks Round 1: Innovation in Shared Solar</b> 5 min. Stephen Frantz, Sacramento Municipal Utility District 5 min. David Arfin, First Energy Finance 10 min. Joy Hughes, The Solar Gardens Institute 5 min. Jennifer Szaro, Orlando Utilities Commission 15 min. Questions & Discussion <i>Moderator: Adam Cohen, SunShot Science and Technology Policy Fellow</i>
10:15	<b>Panel: Increasing Access to Community Solar</b> Ben Airth, California Center for Sustainable Energy Max Joel, Solar One Anya Schoolman, Community Power Network <i>Moderator: Anna Brockway, SunShot Jr. Fellow and Chris Nichols, SunShot Initiative</i>
11:05	Small-group brainstorm: Identify and evaluate existing solutions already in practice
11:45 a.m.	<b>Keynote Presentation and Networking Lunch</b> Greg Rosen, Chief Investment Officer, Mosaic
1:00	<b>Lightning Talks Round 2: Shared and Community Solar Deployment</b> 5 min. Toni Bouchard, SmartPower 5 min. David Morley, American Planning Association 5 min. Doug Danley, National Rural Electric Cooperative Association 5 min. Susannah Pedigo, Xcel Energy 15 min. Questions & Discussion <i>Moderator: Adam Cohen, SunShot Science and Technology Policy Fellow</i>
1:40	<b>Panel: Tax, Financing, and Securities Considerations for Shared and Community Solar</b> Jenny Kassan, Cutting Edge Capital Micah Myers, Clean Power Finance Tom Sweeney, Clean Energy Collective <i>Moderator: Joe Wiedman, Interstate Renewable Energy Council</i>

# Potential Benefits of S/CS

## Market Expansion

- **Access to solar for the other 75%:** Individuals without good roofs for solar can participate
- **Lower barriers to entry**
  - Minimum buy-ins can be  $\frac{1}{4}$  or  $\frac{1}{2}$  of one PV panel
  - Enable participation by new market segments
- **Easy, engaging, potentially transferable**
  - Characteristics can attract new customers
- **Enabling deployment:** Solar on schools, churches, nonprofits, etc.

## Economies of Scale

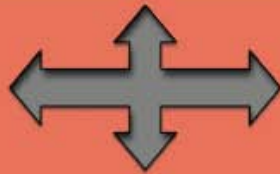
- **Lower soft costs:** Costs are spread over larger projects
- **Siting flexibility**
  - Optimal grid integration
  - Community-scale projects can use space close to load centers unsuitable for small- or utility-scale solar
- **Focused interconnection efforts:** Utilities monitor operation of several larger arrays instead of many small systems

## Opportunities for Innovation

- **Entrepreneurship opportunities:** Wide range of possible business models
- **Lower-cost financing**
  - Community-based market players can lower financing costs
- **Sector interfaces**
  - Opportunities for residential/commercial/municipal collaboration
- **Insight on working with intermediate system sizes**

## Guiding Principles for Shared Solar

1



Expand renewable energy access to a broader group of energy consumers

2



Produce tangible economic benefits on customers' utility bills

3



Remain flexible enough to account for energy consumers' preferences

4



Be additive to and supportive of existing renewable energy programs, and not undermine them



# Community-Owned Solar – Is Complex



- Competing interests
  - Securities and Tax Laws
  - How to take tax credits
  - Consumer Protections
- On-Bill Crediting
- Operations and Maintenance
- Ongoing Administration
- Project Financing
- Customer Financing
- ***Customer Contracts***



# A Guidebook for Community Solar Programs in Michigan Communities



**“This report is intended to help guide Michigan groups through the web of rules and regulations specific to Community Solar in Michigan, and provide up-front information to enthusiasts, community groups, and developers on how to successfully move Community Solar forward in Michigan.”**

Dave Konkle, Community Solar Specialist  
Great Lakes Renewable Energy Association

October 2013

This document was prepared by the Great Lakes Renewable Energy Association under a grant from the MEDC - Michigan Energy Office.





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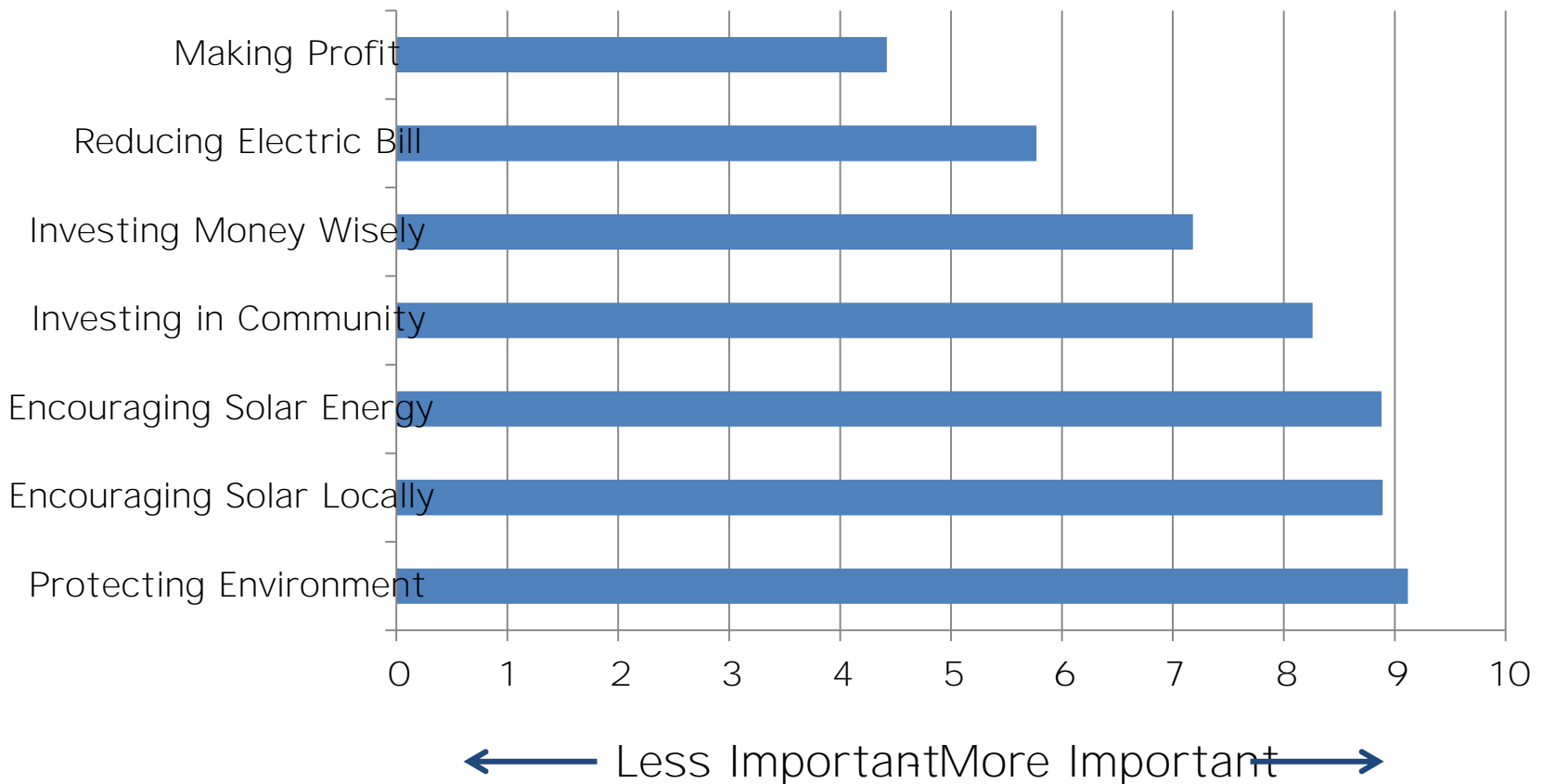


SOLARUPNORTH ALLIANCE



TRAVERSE CITY LIGHT & POWER

# Why Are You Participating in SUN?



# Investment Crowd Funding Legal in Michigan

## Democratizing Solar Power With Community Funding and Crowdsourcing



**Solar for the other 75 percent**

[Herman K. Trabish](#)  
December 12, 2013

GreentechMedia

Act No. 264  
Public Acts of 2013  
Approved by the Governor  
December 26, 2013  
Filed with the Secretary of State  
December 30, 2013  
EFFECTIVE DATE: December 30, 2013

**STATE OF MICHIGAN  
97TH LEGISLATURE  
REGULAR SESSION OF 2013**

Introduced by Reps. Jenkins, Graves, Zorn, Somerville, Kelly, Pscholka, Rendon, Schmidt, Johnson, Kurtz, Schor, Nesbitt, Brown, Bumstead, Cavanagh, Cotter, Daley, Darany, Dianda, Driskell, Durhal, Faris, Farrington, Forlini, Geiss, Goike, Greimel, Haines, Haugh, Heise, Irwin, Kesto, Kivela, Kosowski, Kowall, Lauwers, LaVoy, Lipton, Lori, Lyons, MacGregor, McCann, McMillin, O'Brien, Pagel, Pettalia, Poleski, Potvin, Price, Rutledge, Shirkey, Singh, Slavens, Smiley, Victory and Zemke

## **ENROLLED HOUSE BILL No. 4996**

AN ACT to amend 2008 PA 551, entitled "An act to enact the uniform securities act (2002) relating to the issuance, offer, sale, or purchase of securities; to prohibit fraudulent practices in relation to securities; to establish civil and criminal sanctions for violations of the act and civil sanctions for violation of the rules promulgated pursuant to the act; to require the registration of broker-dealers, agents, investment advisers, and securities; to make uniform the law with reference to securities; and to repeal acts and parts of acts," by amending sections 102a, 202, 504, and 510 (MCL 451.2102a, 451.2202, 451.2504, and 451.2510) and by adding section 202a.



When there is a huge oil spill, it is a disaster!



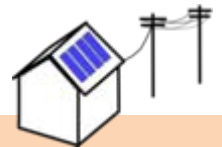
*When there's a huge solar energy spill  
it's just called a "nice day".*



# GLREA

GREAT LAKES RENEWABLE ENERGY ASSOCIATION

Contact Info: [www.glrea.org/](http://www.glrea.org/)  
Dave Konkle [konkle@toast.net](mailto:konkle@toast.net)



## Michigan Renewable Energy Fair 2014

June 2-28

June 2<sup>nd</sup> (Professional/Technical Day)

Ingham County Fairgrounds

