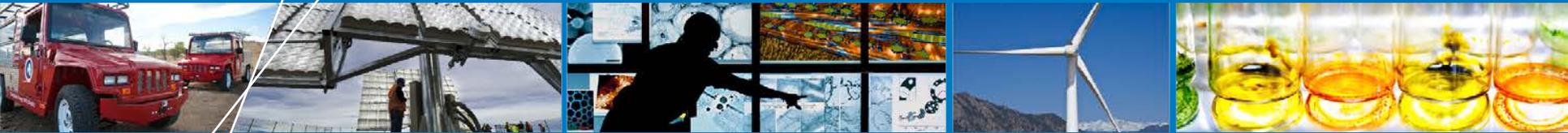


# Solar Technical Assistance Overview and Applications



**Erin Nobler**

March 5, 2014

# Overview

- **Types of TA Available**
- **Examples of Past TA Requests**
- **Program Metrics**
- **What makes a successful TA request?**
- **How To Apply**
- **Q&A**



Art Institute of Chicago - 130.6 kW PV System

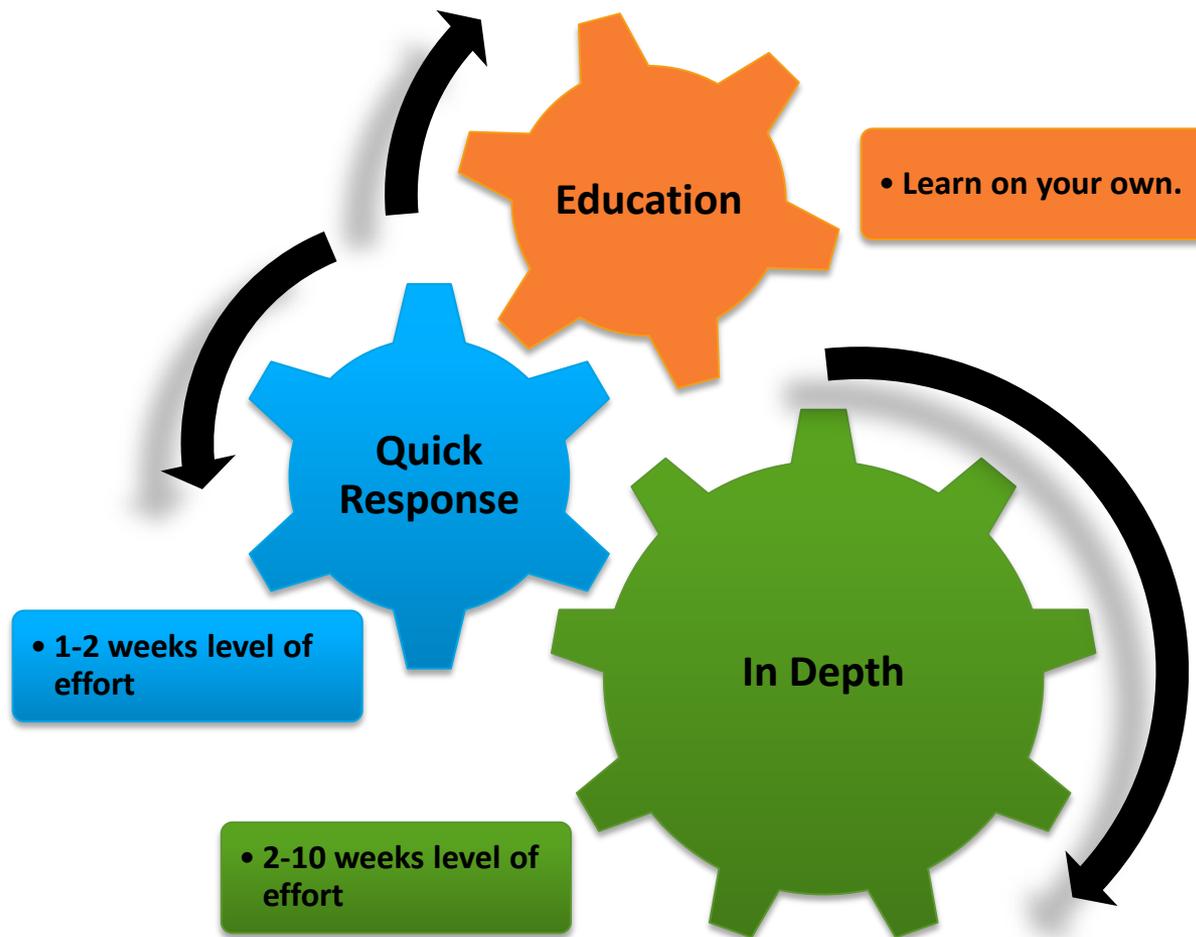
# What is STAT?

## Solar Technical Assistance Team (STAT)

- **U.S. Department of Energy (DOE) Solar Technologies Office, in coordination with the National Renewable Energy Laboratory (NREL)**
- **Objective**
  - Provide current, credible information on solar policy, program, and regulatory choices to entities positioned to impact the policy environment through:
    - Basic solar education for new officials and staff
    - Partnerships to address specific challenges
    - Topical learning opportunities



# Types of TA Available



# Types of TA Available: Education

- **Webinar Series**
  - Solar 101
  - Solar Hot Topics
  - Tools You Can Use
- **Fact Sheets/Memos**
  - Policy Stacking
  - Permitting

The screenshot shows the NTER website interface. At the top, the logo 'NTER National Training & Education Resource' is displayed alongside 'National Training & Education Resource' and links for 'Sign In' and 'Create Account'. A navigation bar includes 'Home', 'Courses', 'About', and 'Forum'. The main content area features a 'Solar Technical Assistance for Policymakers' course page. It includes a 'Powered by SunShot U.S. Department of Energy' logo, a description of the course, a 'Course Contents' list with six modules, and metadata such as 'Estimated Duration: Unknown', 'Last Modified: 8 months ago By NREL', and an 'Average Rating: ★★★★★ (from 2 reviews)'. A 'Sign In to Enter Course' button is present. Below the course details is a 'Course Reviews' section with a star rating scale (1-5 stars) and an 'Average Rating: ★★★★★' display. Two reviews are shown: one by Christopher Pate (5 stars, Nov 27, 2012) and one by Mohammad Masab (5 stars, Dec 7, 2012). A 'Sign In to Review' button is also visible.

Source: NTERlearning.org

# Education

## Solar 101

This series introduces policymakers to strategies for successfully implementing solar in their communities.

- **What a Successful Solar Market Can Do for You**
- **Policy for Distributed Solar 101: What Makes a Solar DG Market?**
- **Solar Technology Options and Resource Assessment**
- **Solar Economics for Policymakers**
- **Policy Environments That Draw Manufacturers and Create Jobs**
- **Regulatory Strategies for Driving the Distributed Solar Market**

## Hot Topics

These webinars cover timely issues that impact the solar market, such as finance, job creation, and regulatory strategies.

- **Solar Finance for Residential and Commercial Customers and Potential Roles of State and Local Government**
- **Shared Solar Programs: Opportunities and Challenges**
- **Solar Powering Your Community: Key Elements of Solar Requests for Proposal**

## DIY Solar Markets

The do-it-yourself webinars offer guided tours of solar tools that aid in assessing, analyzing, and optimizing market conditions.

- **Scenario Solar PV Jobs and Economic Development Impact (JEDI) Model**

# DIY Solar Market Summer Series

**2<sup>nd</sup> Wednesday of EVERY MONTH**  
**Noon – 1 p.m. MST**

**Wednesday**  
**MAY 14th**

**Wednesday**  
**JUNE 11th**

**Wednesday**  
**JULY 9th**

**Wednesday**  
**AUGUST**  
**13th**

- **Top Solar Tools**  
What are they and how do they help policymakers?

- **Resource Maps**  
How to use them, find them, make them

- **PVWatts: What's New?**  
Tips and tricks for the latest update

- **Community Solar Garden Tool**

Subscribe here: [http://www.nrel.gov/tech\\_deployment/stat\\_subscribe.html](http://www.nrel.gov/tech_deployment/stat_subscribe.html)

# Types of TA Available: Quick Response

Applicants	Topic
City & County of Denver, Office of Economic Development	Solar contribution to NZE community, strategies
City of Camden, New Jersey	Solar on contaminated lands
City and County of Denver, Mayor's Office	Solar benefits technical support
Montana Senate District 33	Solar Ready Design presentation
Delaware Public Service Commission	Technology – inverter accuracy
County of Kauai, Hawaii	RFP Assistance
City of Chicago	Airport project technical support
Louisiana PSC	Net metering caps presentation
City of Tucson	Financing options for PV
Ranson, WV	Policy options

## Program Structure

- Rolling application throughout the year
- Short online application
- Quick 2-day turnaround time on request approval
- Up to 80 hours per request



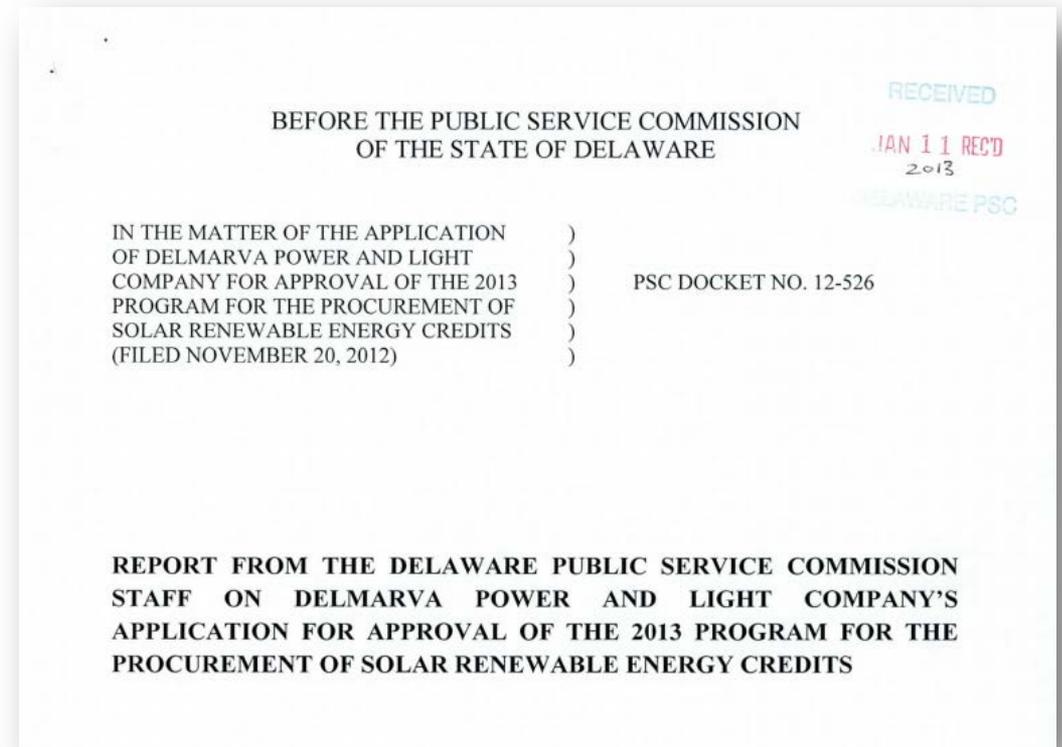
# Past STAT Requests

## Popular Topics

- Net Metering/Interconnection
- Permitting
- Inter-jurisdictional Control (“Home Rule”)
- Codes

# Example Requests

- DE PSC staff is formulating policy on whether inverters are accurate enough to fulfill our statutory requirement of “recorded by appropriate metering”. They are seeking NREL advice to determine how to move forward.



Delaware PSC Docket No. 12-526

# Outreach

**NREL**  
NATIONAL RENEWABLE ENERGY LABORATORY

ABOUT NREL | ENERGY ANALYSIS | SCIENCE & TECHNOLOGY | TECHNOLOGY TRANSFER | TECHNOLOGY DEPLOYMENT | ENERGY SYSTEMS INTEGRATION | NREL HOME

## Technology Deployment

More Search Options | SEARCH | Site Map

### Solar Technical Assistance Team

Through the Solar Technical Assistance Team (STAT), NREL provides research to help stakeholders understand challenges and barriers to the development of solar markets at the state and local levels. The STAT project map highlights these technical assistance projects that have helped communities across the United States. Select a topic category or state to view technical assistance projects. Select a topic category or state to view technical assistance projects. The table below the map shows all the results in the selected category.

**Show Projects by Category**

- All Categories
- Finance
- Policy and Program
- Technology and Resources

Show Results

**Apply Today**  
NREL offers various [technical assistance](#) if you are a state or local government.

### Nebraska

**Policy and Program**

*Technical Assistance Requested:* 1) Analysis of PV financial incentives solar programs for the State Energy Office (SEO). The SEO wants to foster the development of consumer solar markets and to create a solar friendly policy structure. 2) Analysis of PV financial incentives. Nebraska has a state energy loan program but mostly funds wind projects. The SEO wants to examine how to structure state energy incentives and loans for consumers and utilities.

*Results:* 1) NREL will write a three part white paper on innovative solar utility programs for non-regulated utilities specific to load demand in Nebraska, state policy options to develop consumer solar market, and

[http://www.nrel.gov/tech\\_deployment/statmap/](http://www.nrel.gov/tech_deployment/statmap/)

# What makes a good TA request?



**To meet the basic eligibility criteria, applicants must qualify as:**

- State elected official or staff
- State agency staff
- Local elected official or staff
- Local agency staff



**Successful applicants will:**

- Provide staff time to assist
- Articulate existing state barriers
- Articulate specifically how the requested assistance would remove or reduce the barrier
- Articulate how DOE assistance would help facilitate movement toward a robust solar market
- Be well positioned to make change

**In addition, applicants must perform work that is directly related to PV markets/costs.**



# What makes a good TA Request?



Public sector requests are evaluated on:

## Alignment with SunShot Goals

- Affect solar technology costs
- Affect grid integration costs
- Accelerate solar deployment

## Market Impact Potential

## Area of Lab Expertise

## Results Affect More Than Single Project Development

## Likelihood of Action to be Taken

## Appropriate DOE Role

## Replicability

# How To Apply – Quick Response



## Solar Program Quick Response Technical Assistance Request Form

Name:	Click here to enter text.
Phone:	Click here to enter text.
Email:	Click here to enter text.
Office Making Request:	Click here to enter text.
Deadline for Request:	Click here to enter text.
Request:	Click here to enter text.
Estimate of Hours Required to Complete Request:	Click here to enter text.
How will the resolution of this request affect solar technology costs in your area?	Click here to enter text.
How will the resolution of this request affect grid integrations costs in your area?	Click here to enter text.
How will the resolution of this request accelerate solar deployment in your area?	Click here to enter text.

Travel Requested? (Yes/No): Click here to enter text.

Invitation Letter from Public Official Attached? (Yes/No): Click here to enter text.

At any time during the year, send completed Quick Response Request Form to [stat@nrel.gov](mailto:stat@nrel.gov)

Apply online:

[http://www.nrel.gov/ap/solar\\_tech\\_assistance/](http://www.nrel.gov/ap/solar_tech_assistance/)

# How to Apply – In Depth

- Application opened at the end of February 2014
- Apply online:  
[http://www.nrel.gov/ap/solar\\_tech\\_assistance/](http://www.nrel.gov/ap/solar_tech_assistance/)
- Sign up for updates:  
[http://www.nrel.gov/tech\\_deployment/stat.html](http://www.nrel.gov/tech_deployment/stat.html)

Download the [STAT fact sheet](#)  for more details.

## **Subscribe to Email Updates**

[Subscribe to the Solar Technical Assistance Team email list.](#)

## **Contact Us**

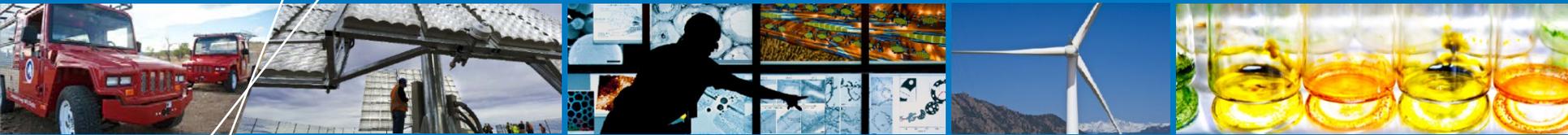
For more information on STAT, or for help with the quarterly application, contact [stat@nrel.gov](mailto:stat@nrel.gov).



# What we need from you...

## FEEDBACK!

- Satisfied:** Is the requester satisfied with the response?
- Used:** Was information used in/contribute to decision making process?
- Incorporated:** Did stakeholders adopt, modify, or maintain solar programs?
- Enhanced Market:** How did the solar market in the assisted jurisdiction change after receiving assistance?



**Thank You!**

# *NREL Solar Technical Assistance in Minnesota*

March 5, 2014



**Lise Trudeau**

Senior Engineering Specialist  
Minnesota Department of Commerce  
Division of Energy Resources



# Columbia Water and Light

Jay Hasheider

March 5, 2014





OUR EXPERIENCE WITH:

# National Renewable Energy Laboratory Solar Technical Assistance Program

- COMMUNITY SOLAR: Topic of interest in Columbia
- In researching the topic we found NREL's program
- Able to fill out the application at my desk
- Acceptance came later than expected
- NREL report addressed a number of questions
- Two presentations: to our Board and to City Council



# **Creating a Municipal Utility Community Solar Program: Opportunities and Challenges for Columbia Water & Light**

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Prepared by NREL under Task #SM133060

By Kim Peterson, Jenny Heeter, Joyce McLaren,  
John Nangle, and Joseph Chavez

November 15, 2013



Jay Hasheider

Energy Services  
Supervisor

Columbia Water and Light  
[rjh@gocolumbiamo.com](mailto:rjh@gocolumbiamo.com)



# **SunShot Solar Outreach Partnership**

**Riana Ackley**

**March 5, 2014**



# SunShot Solar Outreach Partnership

- Resources, technical assistance, training and network building to enable local governments to increase the use and integration of solar energy in communities across the US.

## ICLEI team

- Interstate Renewable Energy Council (IREC)
- Meister Consultants Group (MCG)
- North Carolina State University – NC Solar Center (NCSC)
- Solar Energy Power Association (SEPA)
- The Solar Foundation (TSF)

## ICMA team

- American Planning Association (APA)
- National Association of Regional Councils (NARC)

# SunShot Solar Outreach Partnership

## Resource

## Solar Resource Center

- Case Studies
- Fact Sheets
- How-To Guides
- Model Ordinances
- Technical Reports
- Sample Government Docs

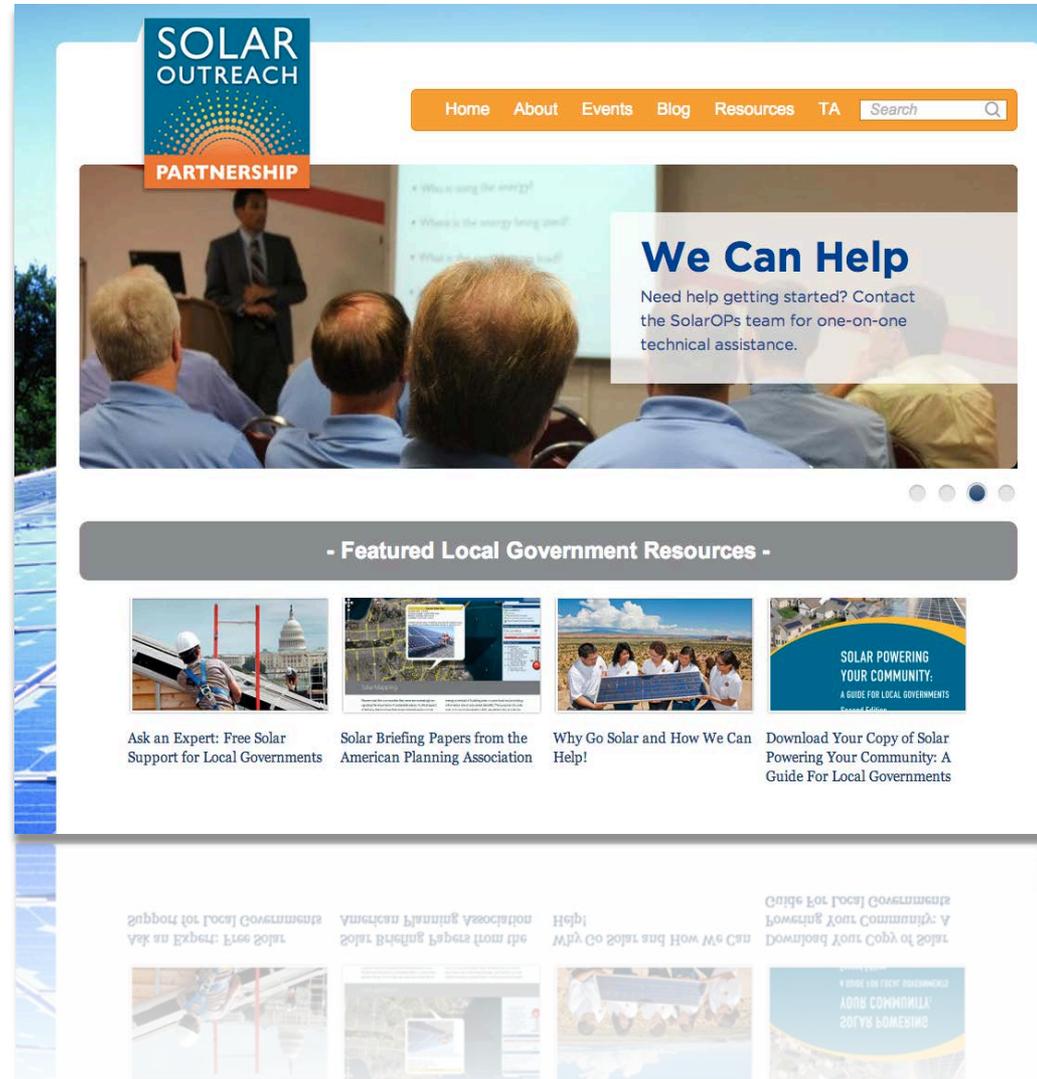
The screenshot shows the SunShot Solar Energy Resource Center website. The page is titled "Solar Energy Resource Center" and is part of the SunShot Initiative. It features a search bar and a map of the United States. The page is organized into several sections: "Topic", "Audience", "Resource Type", and "State". The "Topic" section includes categories like "Completing Installations on Government Facilities", "Educating Customers", "Financing & Incentives", "Installer Training & Certification", and "Manufacturing & Economic Development". The "Audience" section includes "Homeowners", "Installers", "Local Governments", "Non-Profits", "Small Businesses", "State Governments", and "Utility Representatives". The "Resource Type" section includes "Articles", "Case Studies", "Fact Sheets", "How-To Guides", "Podcasts", "Presentations", and "Sample Government". The "State" section includes a dropdown menu for "Any". The page also features a "FIND RESOURCES BY KEYWORD" search bar and a "FIND RESOURCES BY STATE" map. The URL in the browser address bar is [www4.eere.energy.gov/solar/sunshot/resource\\_center/](http://www4.eere.energy.gov/solar/sunshot/resource_center/).

[www4.eere.energy.gov/solar/sunshot/resource\\_center](http://www4.eere.energy.gov/solar/sunshot/resource_center)

# SolarOPs Technical Assistance

## Technical Assistance

- 'Ask an Expert' Web Portal
- Peer Exchange Facilitation
- In-Depth Consultations
- Customized Trainings



# Case Study: Solarize Asheville, NC

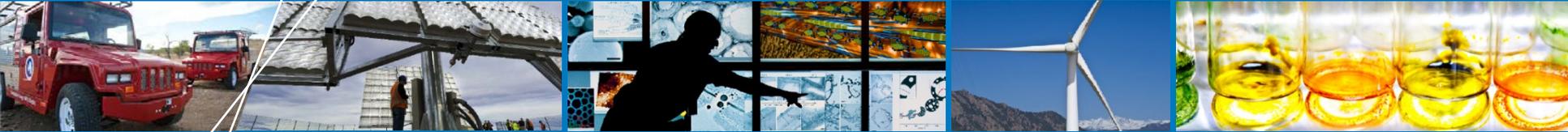
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SolarOPs is providing TA to Asheville to implement a Solarize campaign:

- Offering guidance in drafting and issuing solarize Program installer/contractor RFP
- Guidance in structure and design of the solarize Program
- Participating in educational workshops and events

Update:

- 367 people have signed up
- Installer has completed over 280 assessments



Questions?