

## Assessing Community Preferences Regarding Solar Development

Dwayne Breger,<sup>1</sup> Zara Dowling,<sup>1</sup> River Strong,<sup>1</sup> and Alison Bates<sup>2</sup>

1 UMass Clean Energy Extension 2 Colby College

NREL Technical Monitor: Sara Farrar

NREL is a national laboratory of the U.S. Department of Energy Office of Energy Efficiency & Renewable Energy Operated by the Alliance for Sustainable Energy, LLC Subcontract Report NREL/SR-7A40-90086 June 2024

This report is available at no cost from the National Renewable Energy Laboratory (NREL) at www.nrel.gov/publications.

Contract No. DE-AC36-08GO28308



# Assessing Community Preferences Regarding Solar Development

Dwayne Breger,<sup>1</sup> Zara Dowling,<sup>1</sup> River Strong,<sup>1</sup> and Alison Bates<sup>2</sup>

1 UMass Clean Energy Extension 2 Colby College

NREL Technical Monitor: Sara Farrar

## **Suggested Citation**

Breger, Dwayne, Zara Dowling, River Strong, and Alison Bates. 2024. *Assessing Community Preferences Regarding Solar Development*. Golden, CO: National Renewable Energy Laboratory. NREL/SR-7A40-90086. <u>https://www.nrel.gov/docs/fy24osti/90082.pdf</u>.

NREL is a national laboratory of the U.S. Department of Energy Office of Energy Efficiency & Renewable Energy Operated by the Alliance for Sustainable Energy, LLC

This report is available at no cost from the National Renewable Energy

Subcontract Report NREL/SR-7A40-90086 June 2024

National Renewable Energy Laboratory 15013 Denver West Parkway Golden, CO 80401 303-275-3000 • www.nrel.gov

Contract No. DE-AC36-08GO28308

Laboratory (NREL) at www.nrel.gov/publications.

## This publication was reproduced from the best available copy submitted by the subcontractor and received no editorial review at NREL.

This publication was part of a larger project. The full project can be found at https://ag.umass.edu/solarplanning.

#### NOTICE

This work was authored in part by the National Renewable Energy Laboratory, operated by Alliance for Sustainable Energy, LLC, for the U.S. Department of Energy (DOE) under Contract No. DE-AC36-08GO28308. Funding provided by U.S. Department of Energy Office of Energy Efficiency and Renewable Energy Solar Energy Technologies Office. The views expressed herein do not necessarily represent the views of the DOE or the U.S. Government.

This report is available at no cost from the National Renewable Energy Laboratory (NREL) at www.nrel.gov/publications.

U.S. Department of Energy (DOE) reports produced after 1991 and a growing number of pre-1991 documents are available free via <u>www.OSTI.gov</u>.

Cover Photos by Dennis Schroeder: (clockwise, left to right) NREL 51934, NREL 45897, NREL 42160, NREL 45891, NREL 48097, NREL 46526.

NREL prints on paper that contains recycled content.

## **Community Planning for Solar**



**UMassAmherst** 

Clean Energy Extension

# Assessing Community Preferences Regarding Solar Development



This fact sheet is part of the *Community Planning for Solar* toolkit designed to help Massachusetts municipalities and others proactively plan for solar development in their communities. For more information, please visit: <u>https://ag.umass.edu/solarplanning</u>

**Fact Sheet** 

## Purpose of Community Engagement

Preparing a plan regarding solar development in your community requires bringing together people from a variety of backgrounds and perspectives, who often have strong feelings and preferences about the amount and location of local solar PV projects developed in their community. The planning process should be designed in an inclusive way, where meaningful community engagement is prioritized. With a topic such as solar development, which can elicit strong reactions among community members, proactive community engagement that is perceived as fair will likely lead to more favorable outcomes. Whether your community hosts large tracts of forest, brownfields, residential neighborhoods, and/or large buildings and parking lots, there are a variety of ways community members might envision growth of solar energy. The engagement process can help clarify how and where solar is preferred, so that local government can respond to future solar development requests or to initiate solar projects that are preferred by the community.

## Options to Consider for Community Engagement

Step 4 in the *Community Planning for Solar* toolkit involves assessing community preferences regarding solar siting, capacity, community benefits, and other aspects of solar development.

Community engagement can be multi-faceted and can be one of the best ways to include as many constituents in the decision-making process as possible. The various options for engagement and feedback can build upon each other, providing a more nuanced and comprehensive understanding of the types of solar energy development that are preferred by the community.

In order to assess community preferences, we recommend first holding small focus group meetings with a small number of community participants, followed by conducting a community solar survey,

## **UMassAmherst**

#### SOLAR ENERGY INNOVATION NETWORK U.S. DEPARTMENT OF ENERGY

### **Clean Energy Extension**

in which all community members are invited to offer their input. The *Solar Planning Team* (see *Forming a Collaborative Community Solar Planning Team* (Step 1, Item b)) may also consider conducting interviews with individual community members. By integrating information and data from multiple sources, a comprehensive understanding of community preferences can be attained before more solar development occurs in your community.

## Focus Groups – Small Community Meetings

Focus groups are small meetings of community members (typically up to 10 participants) that are facilitated to learn in-depth about some the concerns and preferences of community members, in a forum where they may ask questions, learn with and from each other, identify priorities, and build trust with the *Solar Planning Team.* A great deal of information can be gathered in a short meeting. These meetings may require a facilitator and can be time-consuming to organize. For instructions on how to conduct a focus group meeting, and a sample agenda, see *Conducting Focus Groups for Solar Planning* (Step 4, Item d), <u>ag.umass.edu/solarplanning4</u>.

#### Interviews

One-on-one interviews are another way to learn detailed information about perceptions of solar in your community. These have the benefit of building a strong rapport with community members, and can be conducted in an ad-hoc format at a public event or location (such as a library, post office, school) or scheduled individually. The drawback is the time commitment; typically, 25-30 interviews should be conducted to obtain a "saturated" sample, whereby the full range of perspectives has been shared. These can be used as an alternative to focus groups.

### Community Survey(s)

Distributing a survey throughout the community for all households to participate is a useful way to learn how the community at large perceives solar, and ask specific questions about scale and capacity of development, preferred development sites in your town, preferred financing options, or other questions you may want to know at the community level. Surveys can be distributed in person, online, or by mail. This knowledge can help planners understand whether strongly held beliefs among vocal constituents are shared among community members. While interviews and focus groups offer a depth of information, surveys offer a breadth of information. For an example *Community Solar Survey*, see *Conducting a Community Solar Survey* (Step 4, Item e), ag.umass.edu/solarplanning4.

### **Open Community Forums**

Later in the *Community Planning for Solar* process, after the *Community Solar Action Plan* has been drafted (Step 5), we recommend holding a series of several (1-3) open community forums. These meetings will include a presentation of the draft *Community Solar Action Plan*, and provide an opportunity for community members to comment on the plan before it is finalized. Open forums can help create a transparent and inclusive process. Facilitators should be cautious of power dynamics that can be present, and design a safe and equitable process that creates opportunity for all community members to participate and provide feedback. This process is discussed in Step 4 of the *Community Planning for Solar* toolkit.