

ADVANCING SMALL BUSINESS SOLAR EQUITY

APPENDIX H: TEMPLATE FOR TRAINING CBOs ON SOLAR

LAKE STREET–WEST BROADWAY–UNIVERSITY AVENUE
MINNEAPOLIS AND SAINT PAUL, MINNESOTA



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About this document

This document is an appendix of “Advancing Small Business Solar Equity: Final Technical Insights Report” (Kazinka et al. 2024), a report published by Lake Street Council and its partners as an outcome of their participation in the Solar Energy Innovation Network. The full report and other appendices can be found at www.visitlakestreet.com/business-blog/sein-report.

About the Solar Energy Innovation Network

The Solar Energy Innovation Network (SEIN) seeks to overcome barriers to solar adoption by connecting teams of stakeholders who are pioneering new ideas with the resources they need to succeed. SEIN is funded by the US Department of Energy Solar Energy Technologies Office and is led by the National Renewable Energy Laboratory.

Teams that participate in SEIN receive direct funding and analytical support from the US Department of Energy national laboratories and participate in peer-to-peer learning with other teams tackling similar challenges. These teams are developing and documenting their solutions for solar adoption with scale in mind so that others can adapt those solutions to their own contexts. Ultimately, the true impact of these teams’ efforts will be to enable a wide array of communities to adopt solar solutions that meet their needs in their contexts.

Disclaimer

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Overview

The role of community-based organizations (CBOs) in the Solar Hub Network model (as described in “Section 3.1: Program Design Concept” in the main body of this report) is to encourage, guide, and support small businesses to explore their options for solar energy. Due to the trusted relationship that many small businesses have with their local business association, chamber, or economic development community organization, these organizations are well-suited to help guide these businesses.

This template outlines an initial plan for a training program to prepare CBOs to provide solar-related technical assistance to the businesses they serve. This training would aim to build a sufficient level of understanding about solar energy production, the landscape of solar energy, an introduction to key organizations and resources, the solar and financial incentives and programs that are available to small businesses, and the steps required to help a business learn about, explore, and install solar.

By the end of the training, the CBO will ideally be ready for the following:

- Have one or more staff who are prepared to speak with businesses about the basics of solar energy as it relates to their business.
- Be prepared to develop a Solar Hub as an organizational program, if desired and funded.

Training topics

The following is a list of training topics with suggestions for topic highlights to cover. These topics could be divided into roughly one training session per topic or combined as the CBO sees fit for its chosen format.

Introduction

- Introduction to the trainer(s)
- Stated goals and a preview of the training
- Background on the Solar Hub Network model:
 - The history of partnership and efforts to date on small business energy efficiency and solar
 - The purpose and justification for CBO-based Solar Hubs and the Solar Hub Network
 - The relationship to existing work rooted in CBOs
- Peer-to-peer relationship building

Solar technology 101

- Electricity system basics, including how electricity is delivered to businesses through a local utility provider
- How photovoltaic (PV) solar generates electricity
- How a solar system interacts with a local utility system
- Installation and interconnection steps
- The lifecycle of a solar system, including maintenance, roof replacement, and system end of life

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- Opportunities and resources for more advanced solar training, if desired

The solar industry and solar economics

- Facts about solar cost and benefits
- The state of the national, regional, and local solar industry:
 - The growth of the solar industry and change over time
 - The impacts of national investments and how they will flow
- Workforce implications and opportunities
- Forecasting the short-term future of solar

Cash flows and financing

- An overview of available incentives
- The timing of solar project costs and savings
- Examples of cash flow for various types of solar projects and incentives
- Financing options for solar

Small business solar

- Common barriers for small businesses to pursue solar
- An introduction to solar ownership models, with adjusted cash flows for each:
 - Direct purchase and ownership
 - Power purchase agreements
 - Community solar gardens
 - Cooperative ownership

Solar technical assistance process

- An overview of the step-by-step process for supporting a small business to install solar (as described in “Section 3.2: Technical Assistance Process” in the main body of this report):
 - Capacity building
 - Outreach and identification
 - Assessment
 - Project development and solar procurement options
 - Proposal review and decision-making
 - Implementation
 - Follow-up
- Asserting the role of the CBO in supporting business success

Training design considerations

When designing the agenda and plan for training, the following design elements should be considered.

Format and setup

The basic starting points for considering how to design the training should include the following:

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- The location, including whether to host the training online or offline.
- The length and number of sessions.
- The cost to participants. We'd suggest a nominal cost at most, which some trainers use as a hook to secure participation. Others will offer the training for free to reduce barriers. Some may even want to consider paying participants to attend if the budget allows.
- The budget for costs like a formal training space, food, or stipends to speakers and/or participants.

Level of depth

It is important to find the balance between getting a PhD in solar energy and having no knowledge of solar. The training must provide enough guidance so that the participating staff of a CBO can understand the basics of small business solar and answer some questions about the process. Still, it will not (in most cases) prepare the training recipient to be entirely fluent in solar technology.

To determine the correct level of depth, consider the following:

- The time available for training. If this is a first-time training, it may be wise to err on the side of overestimating how long it may take for participants to reach the desired level of mastery for each topic.
- The prior level of knowledge that training participants are bringing to the training. A pre-training survey may help assess the baseline of knowledge more accurately.
- The commitment of participating CBOs to create programming beyond the training. If a CBO is certain they will be advancing into the work, it may be more worthwhile to invest the time in deeper knowledge. Others who are in the earlier stages of exploration and cannot yet commit to creating a program may benefit more from a lighter introduction, with more in-depth follow-up training in the future.

Guest speakers

One of the key tenets of the Solar Hub Network is that a cross-sector, cross-organizational partnership approach is stronger than one organization doing this work on its own. This is true for the training as well. Participants will appreciate a chance to hear from a variety of voices, perspectives, and expertise.

Consider inviting one or more of the following potential partners to lead components of the training:

- Utility representatives who can answer questions about how solar plays out within the local utility territory.
- Solar developers and installers—preferably multiple, to provide multiple perspectives and to avoid the appearance of favoritism.
- Representatives of incentive providers to present on the incentive amounts and processes.
- One or more business owners who have installed solar and can speak to their experience and answer questions about the process. It can be especially helpful if the business selected to participate is within the geographic or cultural focus area served by the CBO receiving the training.

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Materials to develop

The following materials should be developed and prepared for a training. Many are detailed in “Section 4.2: Desired Implementation Resources” in the main body of this report.

- A pathway for the solar installation process (diagram/flowchart)
- A basic solar fact sheet for small businesses (e.g., a “What you need to know” fact sheet)
- A basic solar information fact sheet
- A list of frequently asked questions (FAQs)
- Examples of a solar bid
- A building readiness checklist
- A business readiness checklist
- An incentives list and map
- A finance options list and map
- A solar calculator
- A sample vetted solar installer list
- A solar installer Request for Qualification (RFQ) template for CBOs to create their own vetted list of installers
- A “speaker’s bureau” listing presenters who can be called upon by businesses or CBOs to give a presentation at key opportunities
- Case studies, stories, and testimonials from businesses with solar
- Outreach and press materials