Program Guide for Solar Trade Allies

Developed by Energy Trust of Oregon

Part 1: Solar Program General Overview

Last updated April 2024

1.1 Introduction

1.1.1 Purpose of the Program Guide

This Program Guide provides an overview of Energy Trust's Solar Program (also referred to as the “Program”) requirements, processes, and procedures. In this Program Guide, the term "trade ally" means an approved Solar Program trade ally designer and installer.

All approved Solar trade allies are required to read and understand the entire Program Guide and follow the applicable portions as a condition of their agreement with Energy Trust.

- ***Part 1*** includes a basic overview of the program.
- ***Part 2*** includes all performance expectations and requirements pertaining to trade allies.
- ***Part 3*** includes an overview of the residential-scale incentive products offered.
- ***Part 4*** includes an overview of business-scale incentive products offered including Solar Development Assistance.
- ***Part 5*** includes an overview of the solar incentive application process, including all required documentation.
- **Appendix A: Forms Matrix**
- **Appendix B: Solar Feasibility Report Required Documentation**

For information on becoming a Solar trade ally, go to the ally pages on the Energy Trust website.

1.1.2 Revisions to the Program Guide

This Program Guide undergoes occasional revisions as requirements, procedures or processes change. When changes are made, a new version will be issued and posted to the solar trade ally pages on the Energy Trust website at energytrust.org. Energy Trust will also typically announce any new versions in the INSIDER—a newsletter distributed by Energy Trust electronically to all active Energy Trust trade allies. Solar trade allies should check Energy Trust’s website on a regular basis to ensure they are using the current version of the Program Guide.

Current revisions include:

- Restructuring the parts of the Program Guide to include a section for all residential incentive offers and a section for business-scale incentives.
- Providing context for program changes resulting from the passage of HB 3141.
- Removing solar resource tools from the Program Guide. Future updates will be noted on the Energy Trust website under Approved Solar

Resource Tools.

- Information included about the residential scale battery incentive.
- Information included about the Solar Development Assistance update and the introduction of Battery Storage Development Assistance.

1.2 Program Overview

1.2.1 Energy Trust

Since 1999, the Oregon legislature has required Portland General Electric (“PGE”) and Pacific Power to collect "public purpose funds" from their Oregon customers to support energy conservation, renewable energy, and energy market transformation efforts. The Oregon Public Utility Commission (OPUC) was authorized to direct the manner in which the collected funds would be spent.

Energy Trust, a 501(c)(3) non-profit, was formed to manage the investment of the bulk of these funds in energy efficiency, renewable energy and energy market transformation pursuant to a grant agreement with the OPUC. House Bill 3141 passed in 2021 evolving the goals of public purpose funds expenditures to include supporting technologies that support reliability and resilience as well as following the requirement that 25% of public purpose funds be spent to support low to moderate income customers.

Energy Trust expects all Solar trade allies to be generally aware of the background and history of Energy Trust and the Program, and to review the Energy Trust policies which can affect the Program's requirements.

More details on Energy Trust’s history, mission, programs, and policies, as well as a copy of Energy Trust’s grant agreement with the OPUC, by-laws, and strategic plan, are posted on the website. Please contact Energy Trust with questions.

1.2.2 Program purpose and design

The Solar Program is one of Energy Trust’s renewable energy programs. Solar energy has the potential to be Oregon’s greatest source of renewable energy generation. Its availability throughout the state offers the advantage of distributed generation by producing power at the point of use.

To develop the solar market across all sectors and gain long-term solar electricity generation to benefit Oregon customers of Portland General Electric and Pacific Power, Energy Trust has structured the Program to address the primary market barriers of cost, quality, and awareness.

Energy Trust provides:

- Cash incentives to eligible Program participants to reduce the above-market costs associated with installing solar and battery storage.
- Installation standards for systems applying for Program incentives to help promote system performance and longevity.
- A network of trade ally installers who are familiar with Program requirements.

- Industry support in the form of customer leads, trainings, cooperative marketing assistance, and business development funds for active trade allies in good standing.
- Consumer outreach and education to help inform Oregonians about their solar options.

1.2.3 Program Communications

Trade allies must use **PowerClerk** to submit incentive applications and project updates. Unless otherwise noted, all project review, revision, and reservation communications from Program staff to Solar trade allies will be made by email and documented in **PowerClerk**. Program staff prefer to receive communications from Solar trade allies electronically.

Email: The general inbox for Solar staff is **solar@energytrust.org**.

Phone: The direct line for Solar staff is **877.777.4018**.

Mailing Address: Energy Trust of Oregon (Solar Program)
421 SW Oak St, Suite 300Portland, OR 97204

Solar trade allies should have a thorough understanding of all Program documents. Please contact Energy Trust immediately if there are any questions about this Program Guide, the Solar + Storage Design and Installation Requirements, or any other Program-related document.

1.2.4 Policy Overview

The following is an overview of some of the policies that directly affect the Program that Solar trade allies should be aware of. Complete copies of all Energy Trust's current board-approved policies are available for review in the "Library" on the Energy Trust website.

Confidentiality of Program participant information

Information submitted by Program participants under the Program is considered confidential.

Above-market cost

Energy Trust is limited to providing funding for all or a portion of the "above-market costs of new renewable energy resources and customer investments in distribution system-connected technologies that support reliability, resilience and the integration of renewable energy resources within the distribution systems of electric companies." (House Bill 3141) Energy Trust developed a policy outlining an approach and methodology for determining a project's above-market costs. The incentives that Energy Trust makes available through the Program are calculated by Energy Trust in accordance with this policy's requirements.

Renewable Energy Certificates ("RECs")

A Renewable Energy Certificate, or REC, represents the property rights to the

environmental, social, and other non-power attributes of renewable energy generation. RECs are the accepted legal instrument through which renewable energy generation and use claims are substantiated in the U.S. renewable energy market. RECs are measured in terms of their energy value and each REC equals 1 megawatt-hour of grid-tied renewable energy production. To receive Energy Trust incentives, solar system owners must agree not to sell or otherwise transfer any RECs that are generated by the system during the 20-year term as indicated by the solar incentive agreement application.

Self-Direction

Under the OPUC grant agreement, Energy Trust receives and invests a portion of the funds generated by the 3% public purpose charge collected from certain PGE and Pacific Power customers. Although payment of the public purpose charge is generally mandatory, Oregon law recognizes a special group of large electric energy users (those using over one average megawatt a year at a site) who can "self-direct" a portion of their public purpose charge to fund electric energy efficiency and renewable energy investments at their own sites. If a site is certified for self-direction by the Oregon Department of Energy (“ODOE”), that “self-director” may receive self-direct credits from ODOE in exchange for purchasing RECs or green power for its site, or for directly investing in an ODOE-certified renewable energy project at its site. The self-director may then use these credits to reduce the renewable energy portion of the public purpose charge included in its electric bill. If a Program participant is currently self-directing, or decides to in the future, it can affect the amount of incentive funding they will be eligible to receive from the Program.

Program allies should contact the Program to inquire about customer eligibility if they believe a customer site may be a large electricity user. Energy Trust staff can support trade allies in making the determination of whether a customer is eligible to, or has elected to, self-direct renewable funds. Energy Trust may also request additional information about a customer’s self-direct status when reviewing application submittals.

1.3 Project Eligibility

1.3.1 Pre-Screening for project eligibility

Solar trade allies are required to pre-screen projects to help determine eligibility for Program incentives. Final determination of eligibility for Program participation and incentives always rests with Energy Trust.

Electric utility

To be eligible for Energy Trust incentives, the solar electric system must be located on real property and must be grid-tied to a PGE or Pacific Power electric utility account. Floating homes and permanent mobile homes with eligible electric utility service are considered real property. RVs, sailboats, or other portable applications are not allowed.

Definition of a Project

Residential: A residential solar or paired solar + battery storage project is defined by the design and installation of all system components, installed at the same time (within a reasonable construction timeline), intended to serve the residential load of one home. The incentive amount is subject to the current incentive cap and any applicable site cap.

Non-residential: A non-residential project is defined by the design and installation of all system components, installed at the same time (within a reasonable construction timeline), intended to serve the non-residential load of one structure or piece of equipment. The incentive amount is determined by multiplying the incentive rate by the total new capacity installed for the project. For systems installed on multiple structures on contiguous property (e.g. campus, business park, etc.), the customer and trade ally may choose to aggregate the systems and treat them together as one larger project or may treat them as separate individual projects. For all project arrangements, the total incentive amount is subject to the current incentive cap and any applicable customer cap.

In cases where a site may potentially be considered either residential OR non-residential (i.e., a farming property with residential and business uses), Solar trade allies should contact the Program to confirm details and discuss eligibility.

Add-ons and expansions

Customers adding capacity to existing solar installations are eligible to apply for Program incentives if either (i) PV modules are added to an existing system that received an Energy Trust incentive, or (ii) an entirely new system is installed separate from the existing system. In both cases the expansion will be required to meet Energy Trust's Solar + Storage Design and Installation Requirements (available on the Energy Trust website) and will be subject to any additional Program caps that may apply.

When working with a customer that has a previous installation or a pending application, Solar trade allies should contact the Program to confirm details and discuss eligibility.

Additional Program caps to consider

Non-residential: The Program currently caps the total, aggregate amount of incentives available to a single non-residential customer for all solar project applications submitted by that customer within a specific utility territory during the calendar year.

> *This means that even if a non-residential solar project otherwise appears eligible for an incentive, the customer may only qualify for a reduced or no incentive if Energy Trust determines that the total incentives for all of the customer's combined applications during the year have exceeded this Program cap.*

The non-residential Program cap is utility-specific and resets each calendar year.

Residential: The Program currently caps the total, aggregate amount of

incentives it will provide during a five year time period for all solar projects, including any system add-ons or expansions, located at a single residential site (i.e. on a per home basis). All solar incentives reserved or paid in the past five years associated with the residential site—even if to a previous homeowner—will be considered when calculating this Program cap.

This means that even if a residential solar project may otherwise appear eligible for incentives, if Energy Trust paid an incentive for a solar system located at that same residential site in the last five years, then the total amount of incentives available for the project will be subject to this Program cap and the customer may only qualify for a reduced or no incentive.

All solar projects installed within the last five years ARE eligible for full battery storage incentives.

Acceptable solar resource and resource assessment tools

Projects must meet minimum standards for solar resources to qualify for an incentive. Energy Trust uses Total Solar Resource Fraction ("TSRF"), an estimate of the combined losses from shading and non-ideal tilt and orientation, to determine if a project qualifies.

To verify TSRF for a proposed project, Solar trade allies must submit a shade report from an approved on-site analysis tool or an approved remote shade analysis tool. The TSRF requirement is dependent on which type of shade analysis tool is used and how the system is configured:

- For on-site tools that measure shading at specific locations, the point on the array with the lowest resource must have at least a 75% TSRF.
- For remote analysis tools that calculate TSRF across the full array, the average TSRF must be 80% or higher.
- Projects may include modules with a TSRF below the previously listed minimums if the modules are electrically isolated using micro inverters; however, those modules will not be eligible for Program incentives.

Approved resource assessment tools are listed on the Energy Trust website under Approved Solar Resource Tools with instructions on reporting the required information.

Calculating Total Solar Resource Fraction

TSRF is an estimate of the combined effect of shading, tilt, and orientation on a system's performance. Tilt and orientation factor ("TOF") is the percent of solar resource available after factoring in losses due to sub-optimal tilt and/or orientation of the array.

Shading	=	100% - annual loss caused by shading
TOF	=	100% - loss due to sub-optimal tilt and orientation
TSRF	=	Shading x TOF
Lowest TSRF	≥	75%, for an on-site evaluation
OR		
Average TSRF	≥	80%, for a remote shade evaluation

IMPORTANT: Solar trade allies should strive to be as accurate as possible during the solar resource assessment. If, upon verification, an installed project does not meet the TSRF requirement it can void the project's eligibility for Energy Trust incentive funding. If a solar resource estimate is dependent on a customer addressing any issues with trees or other shading barriers at the site property, Program staff strongly recommend that such impacts be remedied prior to moving forward with the installation. If a tree or other obstruction will be removed prior to construction and is subtracted from the solar resource assessment, written documentation explaining the plan of action must be provided with the application.