

# **EPS New Construction**

**Net Zero Residential Installation Requirements** 

### **Revisions**

Energy Trust updates these installation requirements as needed. We are thankful to the industry members, trade allies, and technical specialists that have invested their time to help keep this document current. Revisions from the previous version are summarized in the table below.

| Section         | Revision Summary  |
|-----------------|---|
| Incentive table | Updated incentives for EPS whole home, net zero, net zero model home, and solar EDA for verifiers |
| 1.3 and 1.4     | Updated percent improvement requirement from 20% and 10% respectively to 5%                       |
| 1.6 and 1.7     | Added Model Home section and requirements for net zero model home incentives                      |

2 V1.1, OCTOBER 2024

# **Table of Contents**

| Purpose   |   |  |
|---|---|--|
| Requirements  |   |  |
| General   |   |  |
| Net Zero Homes                                      |   |  |
| Model Homes   | 6 |  |
| Net Zero Accessory Dwelling Units                   | 6 |  |
| Sizing the solar system to offset the electric load |   |  |

## **Purpose**

Energy Trust of Oregon's EPS New Construction offering encourages and supports residential builders to construct homes that are more energy efficient than current energy code by working with trade allies throughout the construction process. Energy Trust offers free technical assistance and training, access to a suite of marketing materials, as well as cash incentives to help builders prepare for future energy code advancements and to demonstrate to the rest of the industry what is feasible for new homes today.

Energy Trust offers net zero incentives to support builders who include an installed solar photovoltaic system that can offset a home or ADU's entire annual electric load.

This document details incentives and requirements for a builder to receive net zero incentives on their EPS New Construction homes or ADU's. Among these is a requirement to host an early design assistance meeting (EDA) to make the most of the development's solar potential and to identify the energy-saving features that will enable the home(s) and/or ADU(s) to qualify as net zero.

The table below shows builder and verifier incentives for Energy Trust of Oregon EPS New Construction net zero homes.

| INCENTIVE TYPE                        | INCENTIVE AMOUNT AND DETAILS  |
|---------------------------------------|---|
| EPS Whole Home                        | \$1,000 to \$3,350 per home (based on efficiency above a typically built home)  |
| Net Zero Home                         | \$3,000 builder incentive per home<br>\$200 verifier incentive per home   |
| Net Zero Model<br>Home                | \$5,000 builder incentive per home (see definition of a Model Home)<br>\$200 verifier incentive per home  |
| Solar EDA                             | \$1,000 builder incentive per development<br>\$250 verifier incentive per EDA   |
| Energy Trust<br>Solar                 | Energy Trust offers incentives for solar installations that meet all program requirements. Solar incentives are allocated in "steps" and gradually reduce over time to support the most projects with Energy Trust's limited budget. For the current incentive levels that the project will qualify to receive contact your solar trade ally contractor or go to energytrust.org/solar. For current incentive levels that projects can qualify to receive, contact your solar trade ally contractor or go to energytrust.org/solar. |
| State and Federal<br>Solar Incentives | Your solar installation may also be eligible for an Oregon state rebate and/or a Federal Tax Credit. Solar trade allies can provide information about all incentives the Builder and Buyer may be eligible to receive.  |

If you have any questions about these incentives or requirements, please contact your verifier or EPS field account manager. Alternatively, you can call 1.866.365.3526, or email <a href="mailto:eps@energytrust.org">eps@energytrust.org</a>.

# Requirements

The requirements below are the minimum criteria for a builder to receive net zero incentives on their EPS New Construction homes.

#### General

- 1.1 Homes must be grid-connected and receive electrical service directly from Portland General Electric (PGE) or Pacific Power.
- Builder and verifier must host an EDA<sup>1</sup> for the development to plan the solar orientation of the home(s) and/or ADU(s), as well as other steps to meet net zero and EPS requirements.
  - 1.2.1 Only one EDA per development that includes one or more net zero homes or ADUs is necessary.
  - 1.2.2 An EDA is not necessary for additional net zero developments provided all the builder's key sub-contractors that are relevant to solar installs (i.e. verifier, solar contractor, electrician) were present for the EDA at the prior net zero development.
- 1.3 Must participate in EPS New Construction and achieve at least 5% above baseline.
- 1.4 Homes or ADUs that include natural gas are eligible to participate, but must have gas savings at least 5% above baseline.

#### **Net Zero Homes**

- 1.5 Home must include a solar photovoltaic system that:
  - 1.5.1 Is designed and installed to offset at least 100% of the estimated annual electric consumption.
  - 1.5.2 Qualifies for and receives Energy Trust solar incentives.

<sup>&</sup>lt;sup>1</sup> Energy Trust of Oregon Early Design Assistance (EDA) Incentive Application: Form 685A available at: https://insider.energytrust.org/programs/eps-new-construction/forms-and-resources/

#### **Model Homes**

Energy Trust offers enhanced incentives to builders if the Net Zero system is installed on a model home. A model home is a new home in a particular subdivision that is purposely unsold and made available for walkthroughs to prospective buyers for a period of time.

Builders must also meet requirement 1.6 and 1.7, in addition to all other requirements, to receive Net Zero incentives for their model home:

- 1.6 Model home must be made available for walkthroughs to prospective buyers for at least 4 months from the time the home is submitted for incentives.
- 1.7 Must supply Energy Trust with proof that Net Zero is being offered as a buyer upgrade option in that development.

NOTE: Builders should consider applying for a <u>Model Home Listing</u> with Energy Trust to enhance traffic and interest in the development.

#### **Net Zero Accessory Dwelling Units**

Energy Trust offers performance-based incentives to builders of new energy-efficient accessory dwelling units (ADUs) that earn an EPS. Qualifying units must meet specific <a href="Energy Trust">Energy Trust</a> requirements, and must permitted as an ADU by the local jurisdiction. ADUs can also qualify for net zero incentives.

Builders must also meet requirements 1.8 and 1.9, in addition to all other requirements, to receive net zero incentives for their ADU:

- 1.8 ADU must be grid-connected and receive electrical service from Portland General Electric or Pacific Power either directly or through a shared meter with the main residence.
- 1.9 Must include a solar photovoltaic system that either:
  - 1.9.1 Is designed and installed on the ADU to offset at least 100% of the estimated annual electric consumption of the ADU, and qualifies for and receives Energy Trust solar incentives.
  - 1.9.2 Is designed and installed on the main residence to offset at least 100% of the estimated annual electric consumption of the main residence and the ADU through a shared meter, and qualifies for and receives Energy Trust solar incentives.
  - 1.9.3 Is designed and installed on the main residence and the ADU, such that the combined estimated annual generation offsets at least 100% of the estimated annual electric consumption of the main residence and the ADU through a shared meter, and qualifies for and receives Energy Trust solar incentives.

#### Sizing the solar system to offset the electric load

To appropriately plan the size of the solar installation to offset the electric load:

#### 1.10 The EPS verifier must:

- 1.10.1 Create an energy model of the home's energy systems based on building plans to determine the estimated annual electric consumption using programapproved modeling software.
- 1.10.2 Provide this estimate to the builder and solar trade ally to inform the design of the solar installation.
- 1.10.3 Update the energy model with the solar trade ally's annual generation estimate (see 1.11.2) to confirm that the generation will offset the electric consumption.

#### 1.11 The solar contractor must:

- 1.11.1 Design a proposed solar photovoltaic system based on building plans and the energy model, and use approved Energy Trust methodology to estimate the annual generation potential.
- 1.11.2 Provide their generation estimate to the verifier so they can update the energy model to confirm that the generation will offset the electric consumption.
- 1.11.3 The builder's project team must review estimated annual electric consumption and generation estimate details during the EDA.