

EPS New Construction

Net Zero Residential Installation Requirements

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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. Net zero has been gaining traction in the past decade, and the ever-decreasing cost of solar has made net zero much more accessible.

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 incentives for Energy Trust of Oregon EPS New Construction net zero homes.

INCENTIVE TYPE	INCENTIVE AMOUNT AND DETAILS
Net Zero	\$1,000 per home
EPS Whole Home	\$1,123 to \$4,085 per home (based on efficiency above a typically built home)
EDA	\$1,000 per development (EPS verifier and solar contractor must be present)
Energy Trust 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.
State and Federal 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 eps@energytrust.org.

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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.
- 1.2 Builder and verifier must host an EDA¹ 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 20% above baseline.
- 1.4 Homes or ADUs that include natural gas are eligible to participate, but must have gas savings at least 10% 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.

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 Energy Trust requirements, and must permitted as an ADU by the local jurisdiction. ADUs can also qualify for net zero incentives.

Builders must also meet requirements 1.6 and 1.7, in addition to all other requirements, to receive net zero incentives for their ADU:

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¹ 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/

1.6 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.

- 1.7 Must include a solar photovoltaic system that either:
 - 1.7.1 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.
 - 1.7.2 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.
 - 1.7.3 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:

- 1.8 The EPS verifier must:
 - 1.8.1 Create an energy model of the home's energy systems based on building plans to determine the estimated annual electric consumption using program-approved modeling software.
 - 1.8.2 Provide this estimate to the builder and solar trade ally to inform the design of the solar installation.
 - 1.8.3 Update the energy model with the solar trade ally's annual generation estimate (see 1.7.2) to confirm that the generation will offset the electric consumption.
- 1.9 The solar contractor must:
 - 1.9.1 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.
 - 1.9.2 Provide their generation estimate to the verifier so they can update the energy model to confirm that the generation will offset the electric consumption.
- 1.10 The builder's project team must review estimated annual electric consumption and generation estimate details during the EDA.

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