

# BUSINESS ENERGY SOLUTIONS

## ENERGY EFFICIENCY CASE STUDY:

### The Thomaston Net Zero Project Thomaston, CT



#### A 170-Year Old Farmhouse Gets a Makeover

Steve and Ann Dunsky love their picturesque and historic 1850s farmhouse but know that historic doesn't always equate to energy efficient. When the Dunskeys decided it was finally time to update their Thomaston, Connecticut home, their goal was to outfit the property with the latest Net Zero technology while maintaining its character. This ambitious project involved both renovations and some new construction so that the home, once completed, will produce all the energy needed to live comfortably. The Dunskeys knew that this complex project required expert engineering, so they turned to [Eversource's](#) New Construction Energy Efficiency team.

Known as "Thomaston Net Zero," the project began in 2020 with contractors assessing the various updates needed. They quickly discovered that the home lacked insulation, had outdated heating, and unusable lighting and mechanical systems. The Eversource team understood the challenge and rose to meet it. After construction is completed, the Thomaston house will eliminate its carbon footprint.

Fast forward several months and the Eversource team is completing a comprehensive task-list to ensure that the home is truly Net Zero. These include but are not limited to:

- Making the house air-tight and highly insulated
- Installing double-pane Low-E3 windows and thermally insulated doors
- Using only ENERGY STAR® appliances and LED lighting
- Installing a geothermal heat pump system to replace the oil-fired furnace
- Building a masonry heater which will be supplied with wood from the property
- Using high efficiency domestic water heaters
- Installing chargers in the garage for electric vehicles
- Implementing water conservation measures including a 2,000-gallon cistern for capturing rainwater runoff from the roof and drains

In addition to performing the above energy efficiency upgrades, Steve and Ann Dunsky have installed an on-site solar array to power the home and eventually feed energy back into the grid.

"In order to achieve our goals, we have to employ this technology; solar panels, energy recovery ventilation systems, a very tight thermal envelope with a lot of insulation. At the end of the day, we'll have a very comfortable house, but it will be a very different house in terms of how it functions. The idea would be to grow our own food, have our own well and produce our own energy; I think that's a model for the future."

**- Steve Dunsky**

Interested in seeing how the project is progressing? Check out the [latest updates](#) and a [timelapse video](#) of construction.

**Find out more about Eversource's New Construction Energy Efficiency team [here](#).**

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