

What is ZEN?

Comprehensive energy support including weatherization, efficient heating solutions, and solar PV, which results in drastic energy and greenhouse gas reductions for the homeowner.

Why Zero Energy Now?

Customer Benefit

Help individuals dramatically reduce energy bills, their carbon footprint, and create a more comfortable home – all at an affordable cost.

Contractor Benefit

Encouraging comprehensive energy projects makes the work more cost effective for the contractor, resulting in a vibrant and healthy energy workforce.

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I feel proud and satisfied to be able to make a difference, and the improved comfort is significant.

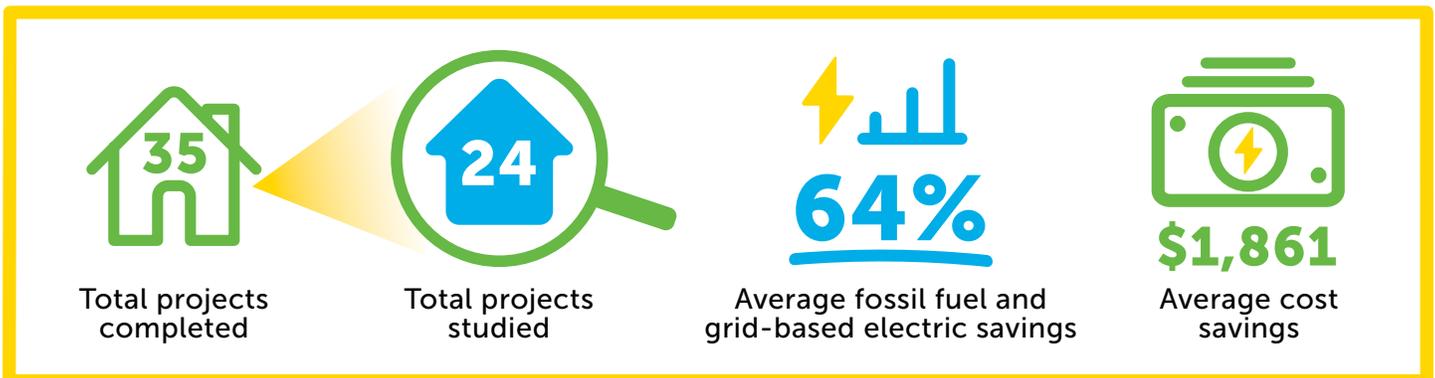
- ZEN Homeowner

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If we could *only* do ZEN projects, that would be great. This really is our business model. We want to be involved with the clients.

- ZEN Contractor

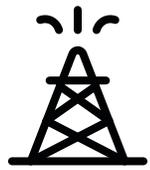
Zero Energy Now 2016-2017 Pilot Program at a Glance



Participants included homeowners across the state – from farmers to teachers to retirees. Common traits among participants were being **environmentally conscious** and **frugal**.

Each year, and **every year**, these 24 homes will:

AVOID BURNING



8,820
gallons of
fuel oil

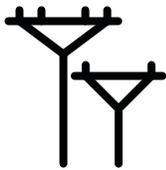


3,103
gallons of
propane



21
cords of
wood

GENERATE



201,468
kilowatt hours
of electricity

SAVE

\$44,670
in energy costs



114
metric tons
of CO₂

Savings Results

DISTRIBUTION OF ENERGY SAVINGS

10%-40%	4 homes
41%-80%	14 homes
81%-100%	6 homes

HIGHEST SAVINGS

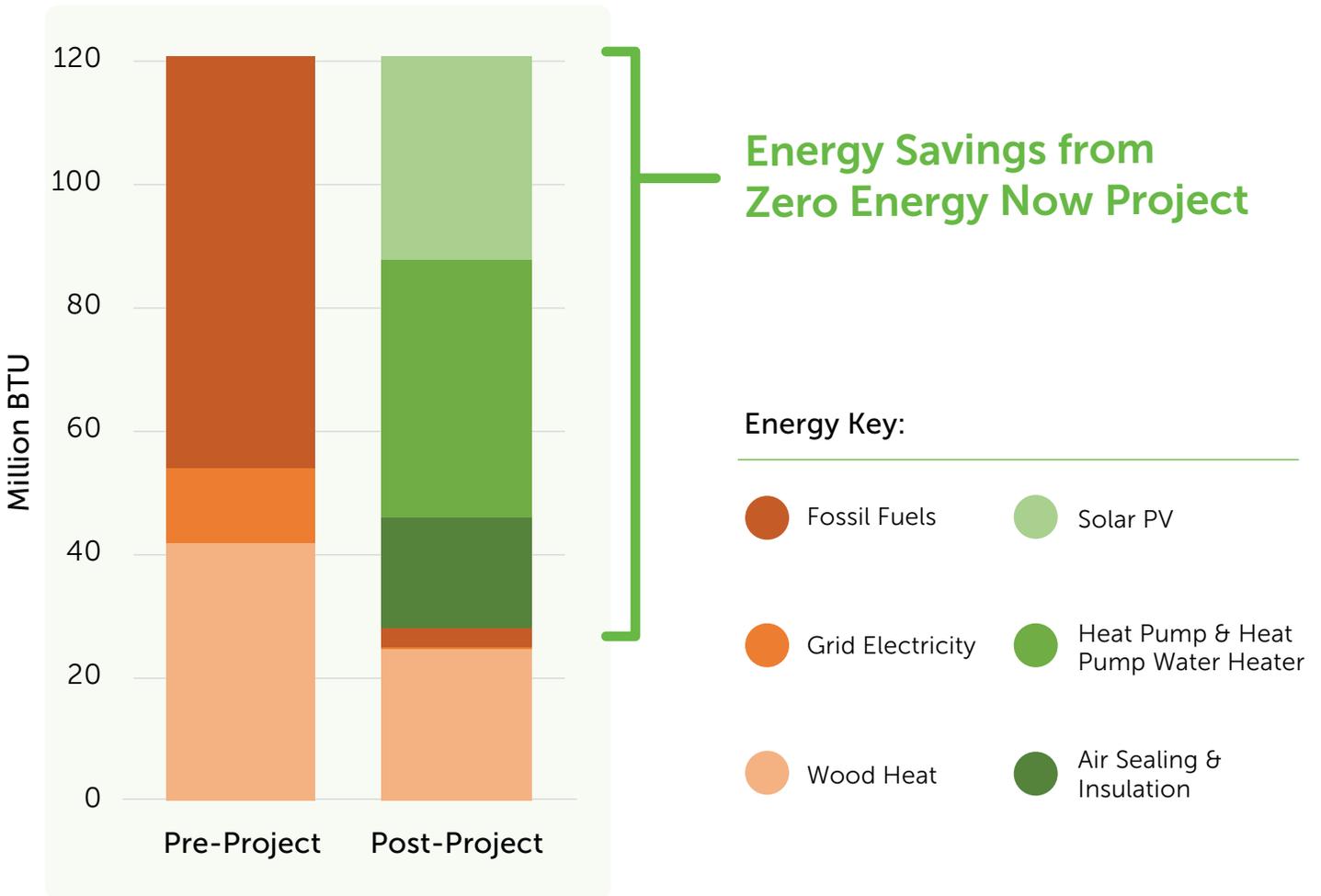
98%
in fossil fuel
and grid-based
electric savings

\$3,885
in energy
cost savings
AVERAGE: \$1,861

- AVERAGE PROJECT COST \$54,565**
- AVERAGE INCENTIVE & REBATE \$13,022**
- AVERAGE RETURN ON INVESTMENT 5.58%**



Savings



Benefits

- Weatherization improves comfort and allows the heat pump to manage a significant portion of heating load.
- Super-efficient heat pump technology sharply reduces energy consumption for heating, while also providing efficient air conditioning in summer months.
- 99% of electricity is sourced renewably on site.

- Comprehensiveness is the key to Zero Energy Now. Each element (weatherization, heat pumps, and customer ownership of renewable generation) must work together for the project's success.
- Cost is not a defining characteristic of a successful project, but incentives are important to achieve customer commitment and promote the program.
- Project design is critical, particularly heat pump sizing. A well-designed modeling tool will be critical to effective design and sales of Zero Energy Now Projects.
- Zero Energy Now is effective in a variety of house styles.
- Wood heat works well in conjunction with heat pumps.
- Customer education is critical to ensure customer satisfaction and proper performance (particularly when it comes to new technologies like heat pumps). Contractors should plan to touch base with customers after they've had time to get to know their "new" home.



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We're able to hit the zero energy target; and we're warmer now because we can afford to keep the house warmer.

- ZEN Homeowner

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People would seek us out; work seemed to find us. The projects were bigger so the profit margin for time put into it was better.

- ZEN Contractor

