

Habitat for Humanity, Grand Traverse Region

U.S. DOE

ZERO

ENERGY READY HOME

2016 VYJNNER

Housing
Innovation

Awards

The Depot Neighborhood | Traverse City, MI | HabitatGTR.org



"I couldn't afford to pay for rent and groceries and gas [before owning my Zero Energy Ready Home." Home owner









PROJECT DATA

• **Layout:** 4 bdrm, 2 bath, 1 fl, 1,352 ft²

• Climate: IECC 6A, cold

• Completed: November 2014

• Category: affordable

MODELED PERFORMANCE DATA

• **HERS Index:** without PV 36, with PV -1

Projected Annual Energy Costs:
 without PV \$1,002, with PV \$106

 Projected Annual Energy Cost Savings: (vs home built to 2009 IECC) without PV \$119, with PV \$896

Annual Energy Savings: without PV
 34.7 MMbtu, with PV 4.2 MMbtu

CONTACT

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KEY FEATURES

- Walls: R-43: 2x6, 24" o.c. with 5.5" R-23 blown fiberglass in cavity, $\frac{7}{16}$ " OSB, three 2" layers XPS R-20 rigid foam on exterior, fiber cement lap siding over 1x4 battens.
- Roof: Raised heel trusses, 2' overhangs at eaves and gables, asphalt shingles.
- Attic: Vented attic with 20" (R-80) blown cellulose insulation, plus closed-cell spray foam at eaves and penetrations.
- **Foundation:** R-22.5 ICF frost-protected shallow foundation walls, three 2" layers EPS under slab for R-30.
- Windows: Triple-pane low-e, argon-fill, U=0.19.
- Air Sealing: 0.88 ACH 50.
- Ventilation: ERV.
- HVAC: Ductless mini-split heat pump, 2 indoor wall units, 18 SEER, 9.3 HSPF.
- Hot Water: Heat pump water heater, 2.75 EF.
- Lighting: 100% LED.
- Appliances: All ENERGY STAR.
- Solar: 7.43-kW PV.
- Water Conservation Features: All fixtures low flow.
- Energy Management System: Energy monitoring of PV HVAC, appliances, and plug load.
- Other: No-/low-VOC paints.





