2026 SUSTAINABILITY & RESILIENCE HOME AND SCHOOL TOUR

EVERGREEN HOME

The Evergreen Home demonstrates a reliable deep energy design focused on total electrification and long-term resilience. It features a high-performance building envelope with 24-inch framing, external insulation, efficient windows, & precision air sealing to minimize energy loss. A solar roof supplies roughly 50% of total energy needs. Battery backup supports grid TOU price savings & can power the house for 1-2 days. Inside, the home has a heat pump, ductless ventilation for fresh air, an induction range, & a high-efficiency water heater. A solar array & battery, a heat pump, & an Energy Recovery Ventilator independently support the 2025 ADU retrofit.



FINANCIAL IMPACT

	Investment	Payback (yrs)
Main Home	$72K	6
ADU	$40K	16

INSTALLATION RESOURCES

- Power Northwest: powernw.com
- Heatpump Store: theheatpumpstore.com

SPECS

- Tesla SolarTile Roof - 10.4 kW capacity
- Two Tesla Powerwall 2 batteries- 27 kWh of storage
- High-efficiency CX34 Hydronic Air-to-Water Monoblock Heat Pump
- LUNOS ductless HRV system for fresh air exchange
- Sanco2 Split CO2 heat pump water heater, smart hot water recirculation
- Professional AGA 48-inch induction range
- 24-inch framing with external insulation and air sealing for a high-performance envelope



Presented by: LOSN Lake Oswego Sustainability Network; Lake Oswego READS

Sponsored by: PGE; A&R SOLAR; Micha McNerney, Windermere Realty Trust

Main Home: $72,000 Energy Investment





Advanced Air-to-Water Heating

Utilizes a CX34 Hydronic Monoblock Heat Pump and Sanden Heat Pump Water Heater.



10.4 kW Solar Generation & 27 kWh Storage

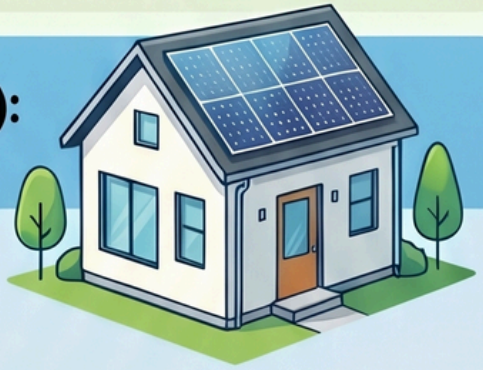
Features a Tesla SolarRoof R2 paired with two Tesla Powerwall 2 batteries.



High-Performance Envelope & Ventilation

Includes 24“ framing, external insulation, LUNOS ductless ventilation, and an AGA induction range.

Accessory Dwelling Unit (ADU): $40,000 Investment





7.12 kW Solar Array & Next-Gen Storage

Powered by 16 CSI panels and a 13.5 kWh Tesla Powerwall 3.



Efficient Climate & Air Quality

Equipped with a Mitsubishi heat pump system and a WhisperComfort ERV.

Grid Resilience & PGE Programs



PGE Smart Battery Incentive

Earn $17/kWh by allowing the grid to discharge batteries during peak events.





Strategic Energy Management

Leverages Time of Use (TOU) pricing and EV Smart Charging to reduce costs.