

UPLANDS HOME

Experience the 12-year journey of the Uplands home, a premier example of residential sustainability. This (almost) all-electric residence features solar panels paired with Tesla Powerwall batteries, which have provided uninterrupted power during two major grid outages. Uplands home utilizes a high-efficiency heat pump, heat pump water heater, and induction stove. Supported by two electric vehicles, the owners estimate annual savings of over \$2,500.



FINANCIAL IMPACTS

Costs: Solar - \$12K after subsidies; batteries: \$13K; heat pumps, cars and stovetop, average costs equivalent to gas-power equipment

Ongoing savings: ~\$2500/year

INSTALLATION RESOURCES

- Solar: solar.neilkelly.com
- Heatpumps: greensavers.com
- Induction bascoappliances.com
- Batteries: tesla.com/powerwall

SPECS

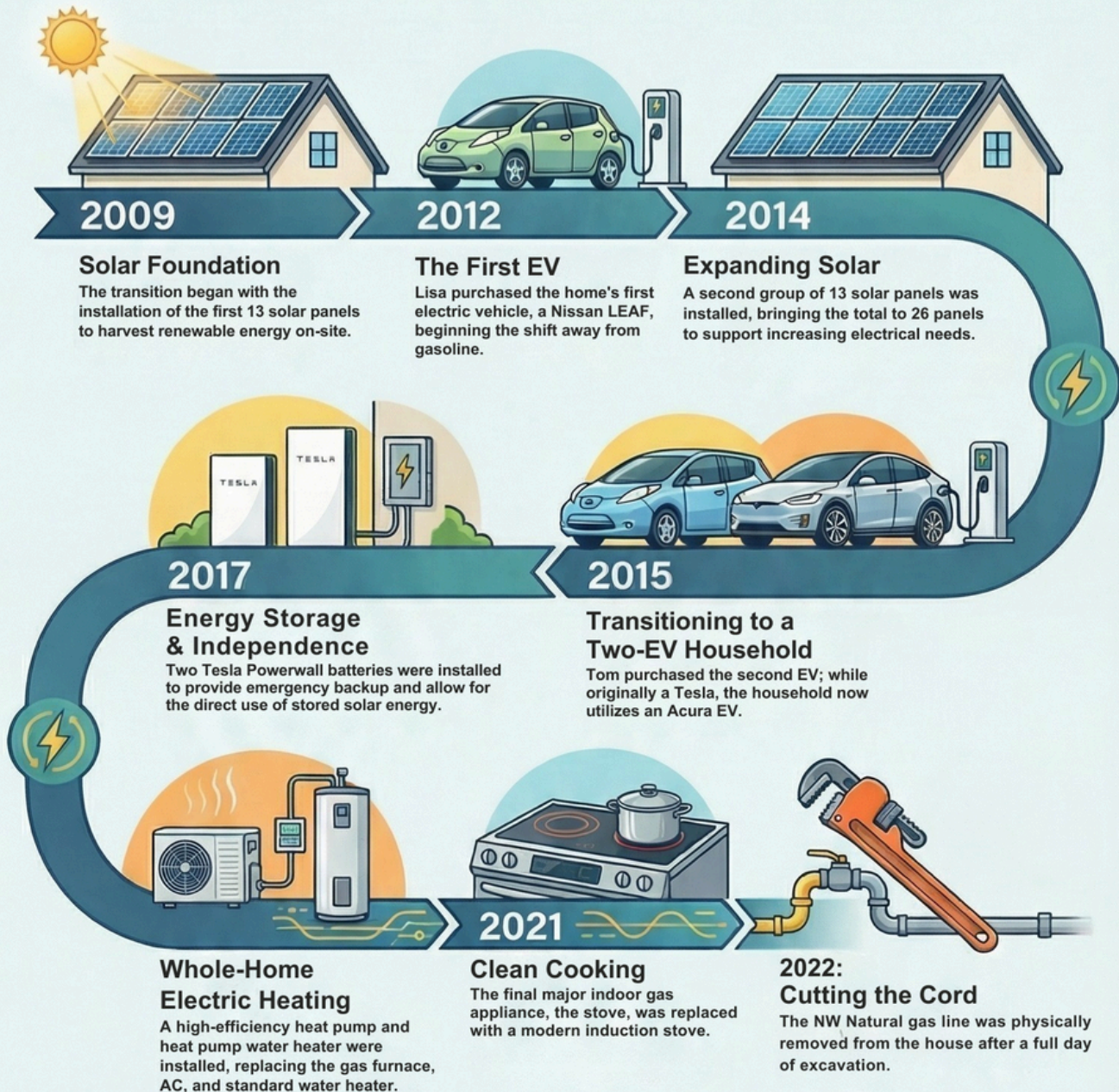
- 26 solar panels
- Two Tesla Powerwall batteries
- 100% Green Power from PGE
- High efficiency heat pump and heat pump water heater
- Induction stove
- Nissan Leaf EV and Acura EV

ENVIRONMENTAL BENEFITS

- Near 100% reduction in GHG
- Saving ~16 tons of CO₂e per year
- Equivalent to not burning ~1800 gal of gas
- Planting ~1016 trees/year
- Half the average US home carbon footprint



Showcasing the step-by-step transformation of a traditional home into a sustainable, highly efficient, and nearly fossil-fuel-free residence over a 13-year period.



Key Takeaways & Impact



\$2,500+ Annual Savings

Cost reductions are achieved through the total elimination of natural gas bills, zero gasoline spending, and fewer electricity costs via solar.



100% Greenhouse Gas Reduction

The switch across four major household systems saves approximately 11.87 tons of CO₂e per year.



Cleaner Indoor Air

Removing gas combustion appliances has significantly reduced or eliminated indoor air pollution.



The "Almost" Factor

Why "Almost" All-Electric?

The home is not yet 100% fossil-fuel-free as propane is still used for the outside grill and the landscaper uses some gas-powered equipment.

Partners in Progress



Solar Power
Supported by Neal Kelly.



Induction Cooking
Supported by BASCO.



Heating & Cooling
Supported by Green Savers.



Battery Storage
Supported by Tesla.