

ZERH 101: Introduction to the U.S. Department of Energy's (DOE) Zero Energy Ready Home Program (ZERH)



Single Family Version 2

Why Build ZERH?

- Every ZERH is efficient, healthy, comfortable, and durable
- Guaranteed quality with third-party inspections
- Rigorous verifications ensure delivered value
- Federal recognition provides a competitive advantage
- Assured customer satisfaction
- 45L tax credit and other incentive funding for builders

"Every...client we have worked with has become an advocate...Our business is steadily growing."

– ZERH Builder

Single Family Version 2: Home Types

Site-built or modular detached single-family homes, detached duplexes, and townhouses.



Every ZERH must first earn **ENERGY STAR** and **Indoor AirPlus** certifications from the U.S. Environmental Protection Agency (EPA), guaranteeing excellent performance.

As the federal government's highest efficiency voluntary residential building certification, ZERH builds on EPA's programs to provide outstanding energy savings, comfort, health, and durability by including these additional features:



Building Thermal Envelope

All components meet insulation levels from the 2021 IECC.



High-Performance Windows

Maximize comfort and savings with energy-efficient windows.



Heating and Cooling System

Ducts and air handlers are located in conditioned space.



Efficient Water Heating

Hot water delivery systems minimize pipe runs, use high-efficiency heaters and fixtures, or the home earns EPA's WaterSense certification.



Ventilation System

Heat or energy recovery ventilators for cold climates.



ENERGY STAR Appliances

Installed refrigerators, dishwashers, clothes washers, and clothes dryers are ENERGY STAR certified.



LEDs

All installed lighting fixtures are LEDs.



Fuel Choice Compatible and Electric Ready

Circuit and/or conduit provided for future installation of electric space and water heating.



Electric Vehicle Ready

Powered 240 Volt/30Amp receptacle in every garage.



Solar Ready

Space provided for a future solar array. Conduit installed from roof to electric panel and reserved space for a circuit breaker.





Since 2013, **over 30,000 single family homes** have been certified across the country, with over **40% growth** in total certifications in 2024.

High Performance is Cost Competitive

- Many components of a ZERH simply require careful planning and attention to detail and **do not add material costs**.
- Advanced technologies can help **reduce energy bills** over the equipment lifetime.
- High levels of energy efficiency reduce utility bills, **saving consumers money**.

"The voluntary ZERH program more than pays for itself by allowing us access to rebates and tax incentives that improve [our] profits significantly. What's more, as a small builder we simply can't compete with large Wall Street builders unless we can differentiate our homes from the others through ZERH."

– ZERH Builder

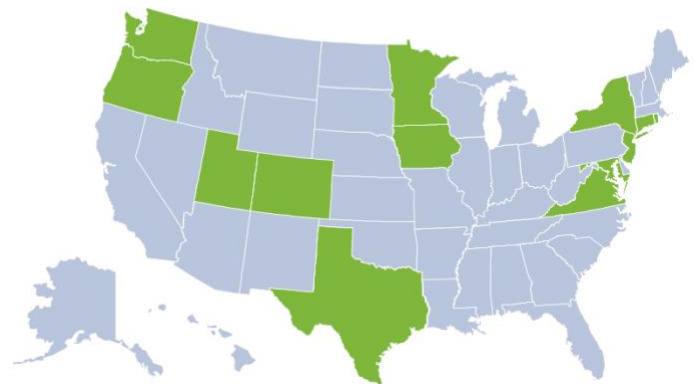
Tax Credits for ZERH

In 2022 the Section 45L New Energy Efficient Home Credit was updated and extended through 2032, and builders can now earn \$5,000 per certified ZERH.

Additional Incentives for ZERH

On top of the 45L tax credit, **many state and local utilities offer incentives** to ZERH builders. ZERH is also embedded into other voluntary programs such as PHIUS, LEED for Homes, and Enterprise Green Communities Plus.

ZERH is also included in, Low-Income Housing Tax Credit (LIHTC) Qualified Allocation Plans, nationwide financing programs, and other local and regional building and utility efficiency programs across the country.



States where utilities offer incentives for ZERH-certified homes.

What's Next?

If you've built ENERGY STAR and Indoor AirPlus certified homes and you're looking to differentiate your homes from others and take the next step towards quality, durability, and increased financial incentives, then you're ready to pursue ZERH. Find a Rater using the Partner Locator on ZERH's website to help you get started!