U.S. DOE Zero Energy Ready Homes for State Qualified Allocation Plans

DOE Zero Energy Ready Homes are high-performance homes which are so energy efficient that most or all of their annual energy use can be offset by on-site renewable energy. A lower total cost of ownership and a straightforward program design make the DOE ZERH certification well suited for state QAPs and other affordable housing programs. Here's why:

Zero Energy Ready Homes offer a lower total cost of ownership.

Certified homes typically have Energy Rating Index (ERI) scores in the 40s or lower, meaning energy savings of more than 50% compared to standard new homes. Added costs (amortized) to build DOE Zero Energy Ready Homes are often lower than the monthly energy cost savings. Beyond energy savings, every Zero Energy Ready Home must pass comprehensive construction checklists for water management, HVAC installation quality, and indoor air quality. These crucial features included in every ZERH can translate into lower costs to maintain and live in the dwelling.

DOE ZERH certification is straightforward and cost-effective for partners.

If your program already recognizes ENERGY STAR Homes adding DOE ZERH is simple. The steps of plan review, energy modeling, and site inspections by an energy rater are essentially the same between ENERGY STAR Homes and DOE ZERH. The rater/verifier will verify a few small additional items for DOE ZERH and may add a small fee for this extra scope. DOE ZERH builds off ENERGY STAR Homes and goes 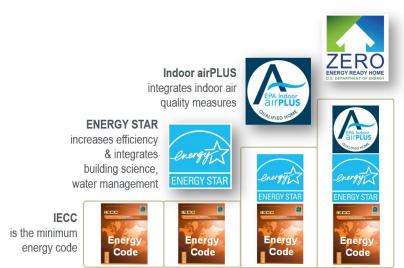beyond for added efficiency and performance (see figure). There is no program registration fee for DOE ZERH projects, and DOE offers extensive resources for builders, developers, and raters. DOE ZERH accepts single-family and multifamily buildings.

Indoor airPLUS integrates indoor air quality measures

ENERGY STAR increases efficiency & integrates building science, water management

IECC is the minimum energy code

Need more information?
To learn more about states and other affordable housing programs which are already leveraging DOE ZERH in their QAPs and further details about the program, please visit the website: www.buildings.energy.gov/zero or send a message to zerh@doe.gov.