

# The 45L Tax Credit for New Energy-Efficient Homes Has Been Exceptionally Effective

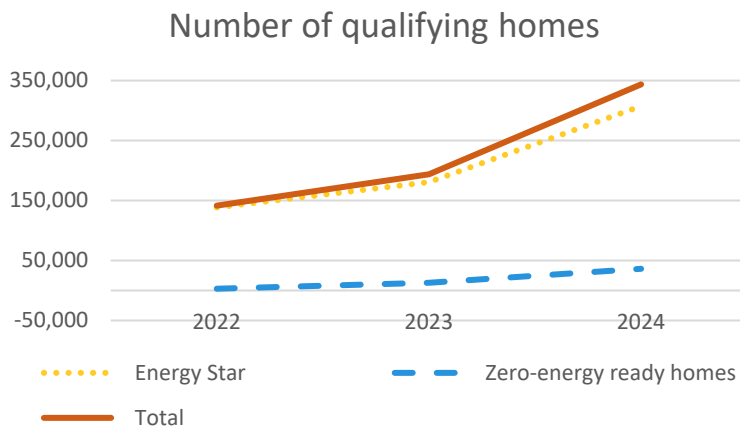
FEBRUARY 2025

**SUMMARY:** The 45L tax credit assisted with the construction of nearly **350,000 efficient new homes** in 2024, a dramatic increase over earlier years. **These homes cut homeowner energy bills by about \$450 per year**, and by 2032 they **will cut peak electric demand by 1,800 MW**. We estimate that the discounted energy savings benefits are more than four times the value of the credit.

## 45L helps build highly efficient new homes

The Section 45L tax credit provides an incentive to home builders to help cover the added costs to build energy-efficient new homes and apartments. A \$2,500 credit is available for ENERGY STAR® certified homes (about 10% lower energy use than homes meeting current construction codes); there is a \$5,000 credit for homes certified under the Department of Energy’s Zero Energy Ready Homes (ZERH) program. These homes have additional energy saving measures plus zero-ready features such as electrical system enhancements to make it easier to add solar systems later.<sup>1</sup>

This tax credit was originally enacted in the bipartisan Energy Policy Act of 2005 and simplified by Congress to align with the widely recognized ENERGY STAR program and the growing ZERH program. The updated incentives took effect in 2023. Since then, the number of qualifying homes has more than doubled, making this credit exceptionally effective at spurring increased market adoption of targeted energy efficiency improvements.

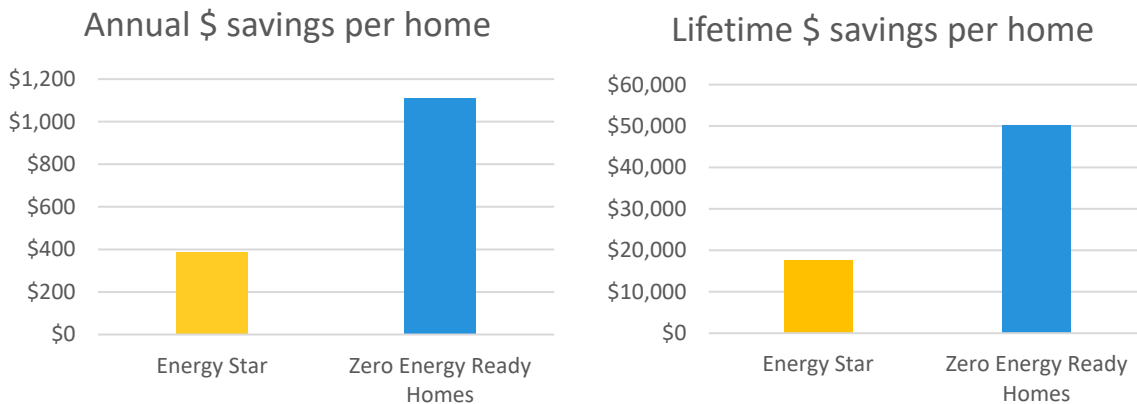


## 45L helps homeowners save money on their energy bills

Analysis by ACEEE estimates that this tax credit will spur the construction of over three million qualifying homes between now and its scheduled expiration in 2032, saving homebuyers an average of \$400 in energy costs for ENERGY STAR homes and more than \$1,000 for ZERH homes each year (\$450 combined average). The average savings add up to about \$17,500 for ENERGY STAR homes and \$50,000 for ZERH homes (\$20,000 combined, all undiscounted) over the 45-year estimated life of the efficiency measures (2024\$). The lifetime benefits average

<sup>1</sup> [www.irs.gov/newsroom/irs-builders-of-qualified-new-energy-efficient-homes-might-qualify-for-an-expanded-tax-credit-under-section-45l](https://www.irs.gov/newsroom/irs-builders-of-qualified-new-energy-efficient-homes-might-qualify-for-an-expanded-tax-credit-under-section-45l).

about \$11,000 if we discount future savings using a 3% per year real discount rate. Based on the number of certifications in 2024, the average tax credit is about \$2,700 per home. Using the assumptions noted above, the discounted energy savings benefits are more than four times the cost. The cost to the Treasury is low for a tax incentive—\$1.7 billion from 2025 until its scheduled expiration in 2032 according to the most recent score.<sup>2</sup>



Notes: Financial savings are in 2024\$ and based on 2024 energy costs. Lifetime savings based on a 45-year measure life and are not discounted.

## 45L reduces peak electricity demand

This tax credit also reduces peak electrical demand, helping reduce the strain on the electric grid from new loads by encouraging more efficient electric equipment and reducing heating and cooling needs. By 2032 we estimate peak demand savings of about 1,800 MW, equivalent to the power output of three large (600 MW) power plants.<sup>3</sup>

## 45L supports new home construction

Home builders and manufacturers have incorporated the 45L tax credit into their home designs, construction plans, and supply chains. Some builders have planned for all of their homes over multiple years to qualify for the credit. Ending the credit now would disrupt the supply of new homes. Without the credit, builders would have to decide whether to increase the prices for their homes, change their designs and suppliers—which would delay construction—or even not build the homes.

## 45L has broad support

A broad range of buildings, energy efficiency, consumer, and environmental stakeholders support continuation of the 45L tax credit, including Leading Builders of America (representing builders who account for about 70% of new American homes), Manufactured Housing Institute, North American Insulation Manufacturers Association (NAIMA), American Chemistry Council, American Institute of Architects, and U.S. Green Building Council (USGBC) as well as ACEEE.

## For more information

Contact Lowell Ungar at ACEEE, [lungar@aceee.org](mailto:lungar@aceee.org).

<sup>2</sup> [www.jct.gov/publications/2023/jcx-7-23/](http://www.jct.gov/publications/2023/jcx-7-23/).

<sup>3</sup> This estimate assumes increasing usage of the tax credit through 2032 and the overall ratio of peak to annual savings in 2023 based on reporting on the U.S. Energy Information Administration Form 861.