

As an Efficiency Rating, the Energy Star Has Faded Homes Given the Eco-Designation Could Face Tougher Rules if the EPA Revises a Program It Says Is Too Lax

For cars, there is the hybrid. For lights, there is the compact fluorescent bulb. For subdivisions, there is the "Energy Star" house -- another way technology is allowing Americans to consume less energy without having to change the way they live.

Launched in the 1990s, the sky-blue Energy Star logo is the U.S. government's seal of approval for more energy-efficient products, from kitchen appliances to entire homes. Last year, builders scored the Energy Star designation for one in five new homes nationwide, a stamp they touted heavily in their ads.

But people who think an Energy Star house represents the height of energy savings should think again.

See the percentage of new homes built in 2008 that qualified for the EPA's Energy Star designation.

The Environmental Protection Agency, which administers the program, says the Energy Star standards are too weak and need updating based on current technology. The program ignores small improvements that could bring big efficiency gains for comparatively little cost, such as low-flow showerheads and better insulation around windows. And the EPA notes that it is easier for a 5,500-square-foot house to get the Energy Star seal than a 1,500-square-foot house -- even though the bigger house likely consumes much more energy.

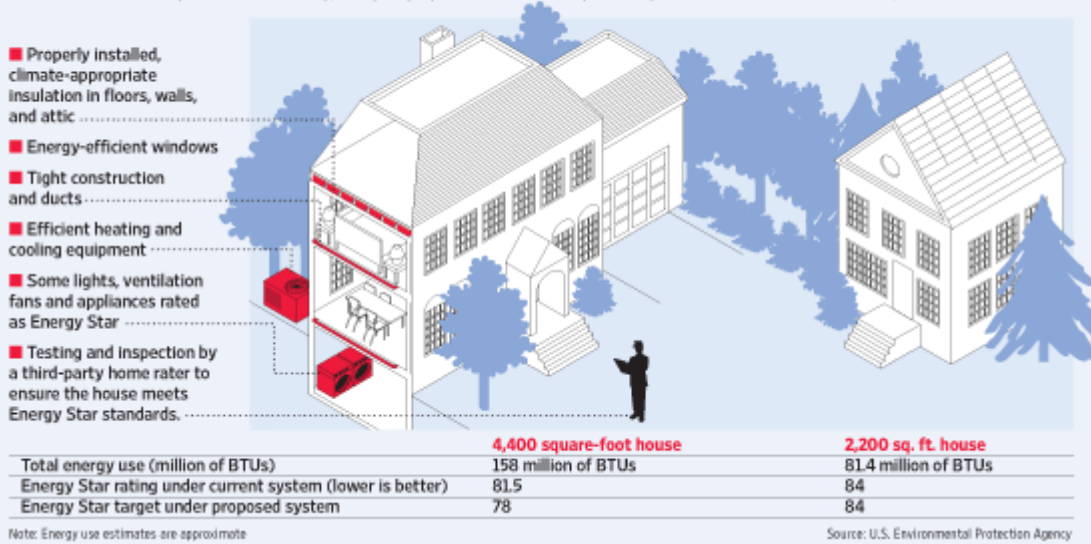
The EPA is preparing to roll out tougher rules to ensure the logo represents robust environmental standards. But it has to walk a fine line, particularly during the recession. If it pushes too hard, builders are likely to bow out of the voluntary program due to the added expense. Their concerns come as the Obama administration is pushing for what amounts to a mandatory nationwide building-efficiency rule. That provision is in an energy bill that the House is expected to vote on today. Builders worry it will raise the sticker price of new houses.

The tougher Energy Star standard "is going to make it more complicated and expensive," says Steve Saunders, whose Texas company, TexEnergy Solutions, is paid by home builders to inspect and certify houses under Energy Star. Though he calls the stricter rules "well thought-out," he predicts they could prompt "a huge number" of builders to leave the program.

Talk of energy efficiency typically focuses on fuel economy on the road. But buildings burn more than automobiles. Together, residential and commercial buildings account for about 40% of U.S. energy use, compared with about 17% for cars and light trucks. A recent Department of Energy study concluded that a typical house's energy use could be cut by at least 30%. It found the monthly mortgage payment needed to cover the higher construction costs would be more than offset by lower monthly energy bills.

How an Energy Star House is Born

To earn the Energy Star stamp, a new house must score 85 or below on a 100-point energy-efficiency scale. Current rules make it easier for a big house to score well, even though it uses more energy. Tougher proposed rules would require a large house to score better than today's minimum number.



The cheapest and easiest way to make a difference is to do it right the first time, when a house is built. Though automobiles have been subjected to a federal fuel-economy standard for three decades, houses have avoided such a nationwide rule. That has left regulation of buildings' energy use in the hands of state and local governments. Standards can vary widely from place to place -- just as they should, home builders say.

The Energy Star standard is compared to a "model" building-efficiency guideline used by state and local governments. To earn the Energy Star label, a new house must score at least 15% better than what that "model" guideline stipulates. The rating takes into account such things as insulation, windows, heating-and-cooling ducts and appliances.

Energy Star has succeeded in popularizing efficient products. It has become the most consistent guide for consumers who want to know the energy efficiency they're getting for their money -- boosting demand and driving down costs. The modern residential thermal window, which curbs energy waste, used to be expensive but is now common in entry-level houses. But the program's shortcomings show how difficult it can be to achieve widespread energy savings. Consider Texas, the nation's biggest single-family home market and the epicenter of the Energy Star program. Some 32,000 Energy Star houses were built last year in Texas -- five times as many as in the No. 2 Energy Star state, Arizona. Fully 41% of all new single-family homes built last year in Texas got the Energy Star label, according to the EPA.

Kaden Homes, a builder based in Fort Worth, builds houses that typically cost about \$500,000 -- luxury level in the local market. Among them is a four-bedroom, multi-gabled model the company calls the Llano -- Spanish for a wide, open plain. Like all Kaden houses, the Llano gets the Energy Star rating.

The Llano, at 4,400 square feet, is 57% larger than the average four-bedroom house in the U.S., which is about 2,800 square feet, according to EPA data. Beyond big rooms, the Llano has vaulted ceilings -- meaning more space to be cooled, heated and lit.

A larger four-bedroom home will almost certainly consume more total energy than a smaller four-bedroom home. But it will likely rate as more efficient when energy consumption is measured per square foot -- as the Energy Star ratings do.

To win Energy Star status for the Llano, Kaden Homes hasn't had to shrink its rooms or lower its ceilings to consume less energy. It has chosen less-visible tweaks, such as installing shiny

panels on the inside of attic ceilings -- so-called radiant barriers -- that reflect heat from the sun back toward the sky, helping cool a house in a hot Texas summer.

Even with such Energy Star features, a house the size of the Llano typically consumes more energy than the average four-bedroom American house, given that the residents of the bigger house plug in more electronic devices, says Sam Rashkin, the EPA's national director of the Energy Star new-home program.

Big houses would lose their advantage under the tougher rule the EPA is preparing. It includes what would amount to a gas-guzzler penalty for houses. In the case of those two four-bedroom homes, the one that is bigger than average would have to improve its efficiency by a greater percentage than the one that is smaller than average. The rule, which the EPA plans to finalize this year and implement in 2011, is intended "to reward appropriate smallness and penalize wasteful largeness," as the EPA puts it in a document explaining the change.

Gradually, some states and cities are adopting their own stricter building-efficiency codes. To stay ahead, the new Energy Star rule also would require such measures as low-flow showerheads to curb hot-water use, new framing tactics to accommodate more insulation, and tougher inspections to ensure that a house is put together in a way that seals the interior space tightly.

Big houses, which the new Energy Star program seeks to penalize, have their appeal. Cherie and Craig Hundley built a Llano house last year atop a hill in Burleson, Texas, near Fort Worth. Ms. Hundley says she wanted to build a smaller house to save energy. But her husband wanted a room to play his stringed instruments and another to store his collection of political memorabilia. The couple ended up expanding the Llano's floor plan to 4,800 square feet. "It's a great house," Ms. Hundley says.

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