



U.S. DEPARTMENT OF
HOUSING AND URBAN DEVELOPMENT
OFFICE OF INSPECTOR GENERAL

November 20, 2015

TO: Clifford Taffet, General Deputy Assistant Secretary, D

FROM: Kathryn Saylor, Assistant Inspector General for Evaluation, GAH

SUBJECT: State Energy Standards (Project Number 2015-OE-0005)

In response to your request, the Office of Inspector General, Office of Evaluation (OE), reviewed State qualified allocation plans (QAP) to identify what building standards States use to award tax credits for low-income housing construction. The U.S. Department of Housing and Urban Development (HUD) encourages State and local governmental entities administering HUD-funded Home Investment Partnerships Program projects to adopt Energy Star standards for new construction or substantial rehabilitation. The HUD Office of Community Planning and Development (CPD) tracks units that meet the Energy Star building standard as they contribute to HUD's priority goal for energy-efficient housing. You asked OE to review QAPs to determine whether States included alternative building standards, equivalent to the Energy Star building standard, which could contribute to achieving the priority goal.

Background

In its 2006 Report to the Congress, Promoting Energy Efficiency at HUD in a Time of Change, HUD described its department wide comprehensive strategy to significantly reduce energy use in HUD's inventory of public and assisted housing and in HUD-financed housing with a goal that HOME grantees adopt energy efficiency guidelines and incorporate Energy Star product and construction standards. In fiscal year 2007, CPD began tracking the number of HOME units built to Energy Star standards.

There is now a proliferation of standards, rating, and certification programs in the marketplace to help guide, demonstrate, and document efforts to deliver sustainable, high-performance buildings.

Source: [Building Green](#)

In its December 2012 progress report and energy action plan, Affordable Green: Renewing the Federal Commitment to Energy-Efficient, Healthy Housing, HUD reported spending approximately \$6.4 billion annually on utility costs in public and assisted housing. To address energy efficiency goals, HUD adopted energy building rating standards, including Energy Star, the 2009 International Energy Conservation Code (IECC)¹, the Enterprise Green Communities Initiative, the National Green Building Standard, Leadership in Energy and Environmental Design (LEED) for Homes (for single-family), and LEED New Construction (for multifamily or commercial development), as well as regionally or locally recognized green standards such as Earthcraft and Built Green.² Green, or sustainable, building is the practice of creating and using healthier and more resource-efficient models of construction, renovation, operation, maintenance and demolition. In its fiscal year 2014 agency financial report, HUD committed to creating energy-efficient, green, and healthy housing, saying that reducing utility costs—generating savings for residents and owners as well as for taxpayers—is a key HUD priority. In May 2015, HUD and the U.S. Department of Agriculture adopted the 2009 International Energy Conservation Code (IECC) as the minimum energy standard for construction of rental housing and home-ownership housing assisted under the HOME program (E-05-B).

On its Web site, the U.S. Environmental Protection Agency (EPA) describes Energy Star as a voluntary program *to identify and promote energy-efficient products and buildings to reduce energy consumption*. To earn the Energy Star label, a home must undergo a process of inspections, testing, and third-party verification to meet strict requirements by delivering better quality, comfort, and durability. Homes certified under EPA's 2012 requirements are at least 15 percent more efficient than those built to the 2009 IECC standard and include additional energy-saving features to deliver a performance advantage of up to 30 percent compared to typical new homes.³

The Low-Income Housing Tax Credit program, managed by the Internal Revenue Service (IRS), encourages the development of low-income rental housing by providing owners with tax credits to construct new residential and commercial projects. To participate in the program, IRS requires State housing finance agencies to maintain QAPs that explain how the program will be administered in the State. One of ten criteria that a State must use to allocate housing credit

To earn the Energy Star certification for an entire home, the home must meet strict guidelines for energy efficiency. Homes achieve this level of performance through a **combination** of energy-efficient improvements, including effective insulation systems, high-performance windows, tight construction and ducts, efficient heating and cooling equipment, and Energy Star-certified lighting and appliances.

Source: HUD Guidance for Reporting CDBG (Community Development Block Grant) Accomplishments and Performance Measures in IDIS (Integrated Disbursement and Information System), October 2012

¹ IECC is a model code that establishes minimum design and construction requirements for energy efficiency.

² Green, or sustainable, building is the practice of creating and using healthier and more resource-efficient models of construction, renovation, operation, maintenance and demolition. <http://archive.epa.gov/greenbuilding/web/html/>

³ EPA established the Energy Star program in 1992 as a voluntary program under the authority of the Clean Air Act. In 2005, Congress enacted the Energy Policy Act and "established at the Department of Energy and the Environmental Protection Agency a voluntary program to identify and promote energy-efficient products and buildings to reduce energy consumption, improve energy security, and reduce pollution through voluntary labeling of or other forms of communication about products and buildings that meet the highest energy efficiency standards." <http://www.energystar.gov/about?s=footer>

amounts among projects is the energy efficiency of the project. IRS does not require States to identify or include energy efficiency standards in their QAPs.

Results

We reviewed QAPs for the 50 States and the District of Columbia. States did not include the level of detail on building standards that CPD anticipated in their QAPs. States discussed compliance with elements of some energy efficiency building standards but were not consistent in requiring overall compliance with the standards. This inconsistency prevented us from determining with certainty that alternative standards in any QAP were equivalent to Energy Star certification requirements. The results of our QAPs review are attached.

Since HUD committed to support Energy Star as a priority goal, it has adopted numerous additional building standards that contribute to energy efficiency. In the HUD FY 2010-2015 Strategic Plan, HUD committed to support energy efficient, green, and healthy housing as a specific strategic goal. Just as HUD adopted the energy star building standard as its quality measure for the HOME program in 2006, it could adopt new policy to expand tracking toward its priority goal to include additional building standards.

To get a more complete picture of the energy efficiency building standards States have implemented, we suggest you refer to

- A U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Web site, which provides the status of State energy code adoption (<https://www.energycodes.gov/adoption/states>) and
- The International Code Council Web site, which provides State and jurisdiction adoption of a variety of international construction codes (<http://www.iccsafe.org/about-icc/overview/international-code-adoptions/>).

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Attachment

Qualified Allocation Plans Comparison

| State | Plan date | Energy standards and green programs |
|--------------------|---------------|---|
| Alabama | 2015 | 2009 or 2012 IRC Energy Star** |
| Alaska | 2013 | 2009 and 2012 IECC Energy Star** BEES |
| Arizona | 2014 | IECC Energy Star** |
| Arkansas | 2013 | None included in QAP |
| California | 2015 | LEED Green Communities Green Point 2008 Energy Efficiency Standards Energy Star** |
| Colorado | 2014 | 2011 Enterprise Green Communities LEED Energy Star** Energy Outreach |
| Connecticut | 2013 | None included in QAP |
| Delaware | 2014 | Energy Star** 2009 IECC |
| Florida | 2014 | None included in QAP |
| Georgia | 2014 | Energy Star** IECC Earth Craft LEED EGC |
| Hawaii | 2013- 2014 | State Energy Conservation Code LEED NGBS EGC Energy Star |
| Idaho | 2014 | IECC Energy Star LEED NGBS EGC ICC 700 National Green Building Standards |
| Illinois | 2014 | Energy Star** LEED EGC NGBS |

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|-----------------------|-----------|---|
| Indiana | 2014-2015 | Energy Star** IRC LEED NGBS EGC |
| Iowa | 2014 | 2012 IECC Energy Star IRC |
| Kansas | 2015 | 2006 IECC Energy Star Kansas Energy Star |
| Kentucky | 2014 | None included in QAP |
| Louisiana | 2013 | Energy Star 2009 IECC LEED EGC Louisiana Energy Code |
| Maine | 2014 | Maine Uniform Building and Energy Code 2009 IECC Energy Star** |
| Maryland | 2014 | None Included in QAP |
| Massachusetts | 2014 | Energy Star** |
| Michigan | 2013-2014 | Energy Star** LEED EGC |
| Minnesota | 2014-2015 | None included in QAP |
| Mississippi | 2015 | Energy Star** |
| Missouri | 2014 | 2012 IRC |
| Montana | 2014 | 2009 IECC Energy Star |
| Nebraska | 2014 | None included in QAP |
| Nevada | 2014 | Energy Star IECC Division Energy Standards LEED |
| New Hampshire | 2014 | None Included in QAP |
| New Jersey | 2013 | New Jersey Energy Star Equivalency Requirements Energy Star NGBS LEED |
| New Mexico | 2013 | LEED EGC NGBS |
| New York | 2013 | Energy Star** New York State Energy Research and Development Authority Multifamily Building Performance Program |
| North Carolina | 2014 | Energy Star |

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|-----------------------|---------------|---|
| North Dakota | 2014 | LEED NGBS |
| Ohio | 2014 | 2011 EGC LEED |
| Oklahoma | 2013 | Energy Star** |
| Oregon | 2014 | None included in QAP |
| Pennsylvania | 2014 | Energy Star 2009 IECC |
| Rhode Island | 2014 | Energy Star |
| South Carolina | 2013 | Energy Star 2006 IECC |
| South Dakota | 2013 | Energy Star |
| Tennessee | 2015 | 2009 IRC Energy Star** |
| Texas | 2014 | None included in QAP |
| Utah | 2014; 2015 | Energy Star LEED EGC |
| Vermont | 2015 | LEED Energy Star NGBS |
| Virginia | 2014 | Energy Star** LEED Earth Craft |
| Washington | 2012 | None included in QAP |
| Washington DC | 2012 | 2012 IECC LEED Energy Star International Green Construction Code |
| West Virginia | 2013- 2014 | Energy Star IECC |
| Wisconsin | 2013- 2014 | None included in QAP |
| Wyoming | 2014 | Energy Star IRC IECC Model Energy Code |

Legend:

** Only required to comply with certain aspects of the Energy Star program

EGC—Enterprise Green Communities

LEED—Leadership in Energy and Environmental Design

NGBS—National Green Building Standards IECC—

International Energy Conservation Code IRC—

International Residential Code

BEES—Building and Energy Efficiency Standards