



Third Party Green Building Standards

Improving Sustainability in Housing Credit Properties

2023

Maximizing the sustainability of Low Income Housing Tax Credit (Housing Credit) properties reduces energy and water consumption, cuts carbon emissions, improves the financial performance of properties, and creates healthier and more resilient homes for residents most vulnerable to the effects of climate change. One mechanism used by state and local Housing Finance Agencies (HFAs) to add a broad range of sustainability criteria into the Qualified Allocation Plan (QAP) is through third-party green building standards (green building standards).

Green building standards are certification systems established by independent third parties – like Enterprise Communities or Phius– that provide clarity for developers on how to incorporate sustainability in project design and construction. For an HFA, green building standards represent a streamlined process through which the HFA can help advance a range of valuable energy and water efficiency standards through their Housing Credit awards to improve the performance of subsidized affordable housing. A developer who commits to obtaining a green building certification agrees to prioritize sustainable building design elements and systems, such as high-efficiency equipment, renewable energy, and environmentally-friendly building materials, in their project.

The following analysis, which examined 53¹ Qualified Allocation Plans (QAPs) released before March 2023, reveals how HFAs incorporate green building standards. Our findings confirm that green building standards continue to be the most widely adopted method to improve the sustainability of Housing Credit properties.

Use of Green Building Standards is on the Rise

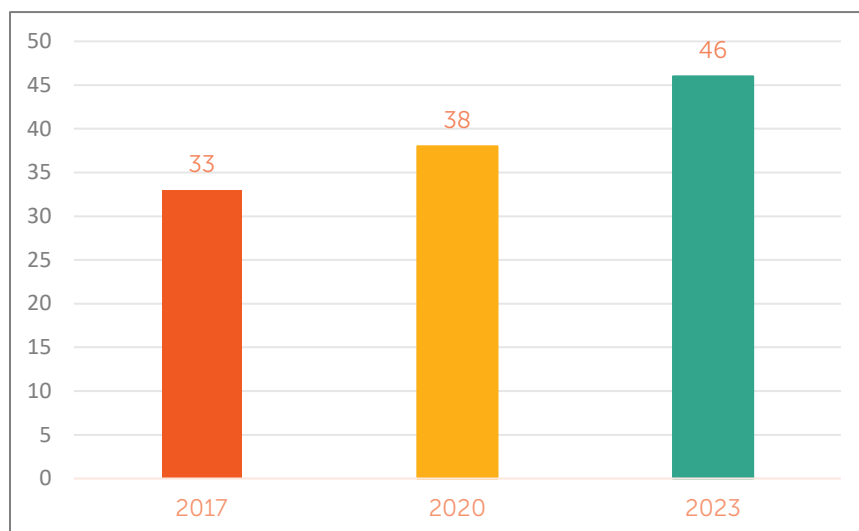
At least 46 HFAs explicitly incorporate green building standards in their QAP – an increase of eight states since NHT's last analysis in 2020, and a jump of 13 states since the 2017 analysis. See Figure 1 below.

46 OUT OF 53 HFAs

explicitly incorporate green building standards in their QAP

¹ All 50 states, plus DC, New York City and Chicago

FIGURE 1: Number of QAPs that Include Green Building Standards (2017-2023)



Though other standards exist, the most common green building standards incorporated into a QAP include:

- Enterprise Green Communities (EGC)
- US Green Building Council’s Leadership in Energy and Environmental Design (LEED)
- National Green Building Standards (NGBS)
- Passive House (Phius)
- International Living Future (including Living Buildings Challenge)
- DOE’s Zero Energy Ready Homes (ZERH)
- EPA’s Energy Star²

A full breakdown of each state’s reference standards is provided in Table 1.

Incorporating Green Building Standards into QAPs

HFAs take different approaches to incorporating green building standards in their QAPs:

- **HFAs either require or incentivize developers to meet green building standards.** HFAs include green building standards as minimum threshold requirements in order for a project to be eligible for Housing Credits. HFAs also incentivize green building standards by awarding points to applicants as part of a competitive selection process.³
- **Many HFAs incorporate multiple green building standards into their QAP,** allowing developers to choose the option that best suits their project. For example, developers in Georgia are required to certify their Housing Credit properties through either EGC, NGBS, LEED, EarthCraft, or GBI Green Globes. While each green building standard provides a holistic approach to sustainable design and construction, standards vary in scope and

² NHT’s previous QAP analyses (in 2017 and 2020) did not capture Energy Star certification. Energy Star is included in Figure 2, below, to reflect our 2023 analysis. However, the 2017 number may not be zero.

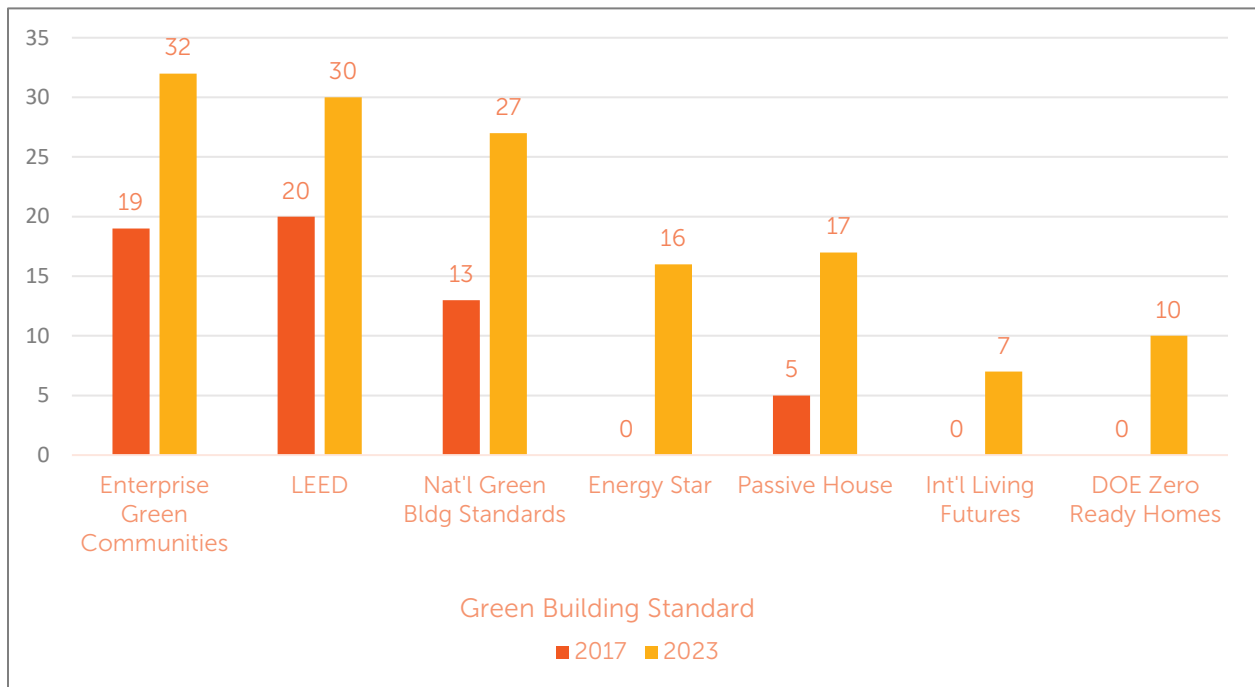
³ Many HFAs also offer points or require specific sustainability elements outside of green building standards. These can include individual energy and water efficiency measures or the use of healthy buildings materials.

emphasis. Some certifications, for example, require deeper energy savings than others. By offering multiple options, HFAs can prioritize the standards that best meet their sustainability goals and incentivize developers to use more rigorous standards that achieve deeper energy savings. In Illinois, developers may receive seven points for EGC and LEED Gold, nine points for International Living Futures Core Green Building Certification and ten points for achieving National Green Buildings Standard Certification, LEED Platinum, Passive House or Living Building Challenge.

- **More HFAs are encouraging Housing Credit applicants to achieve advanced standards** (i.e. Passive House, International Living Futures, or ZERH). In 2017, only five HFAs awarded points for Passive House certification, and no agency encouraged International Living Futures or ZERH certification. In 2023, at least 17 HFAs award points for Passive House certification, ten award points for achieving ZERH, and seven award points for Living Building Challenge certification.

Enterprise Green Communities, LEED, and National Green Building Standards remain the most popular green building standards to integrate into a QAP, with each showing an increase in the number of HFAs adopting them since 2017. (See Figure 2 below)

FIGURE 2: Number of QAPs that Include Green Building Standards by Standard Type (2017-2023)⁴



⁴ CT, NY, OR and TX include a ZERH certification (either as a requirement or an incentive) outside of the QAP. Additional states -- DC, IL, MI and RI -- allow ZERH certification to be achieved via a state-wide energy efficiency tier or another green building standard certification that may require a DOE ZERH certification such as EGC Plus. As these states do not explicitly incentivize or require a ZERH certification in the QAP, these states are excluded in Figure 2.

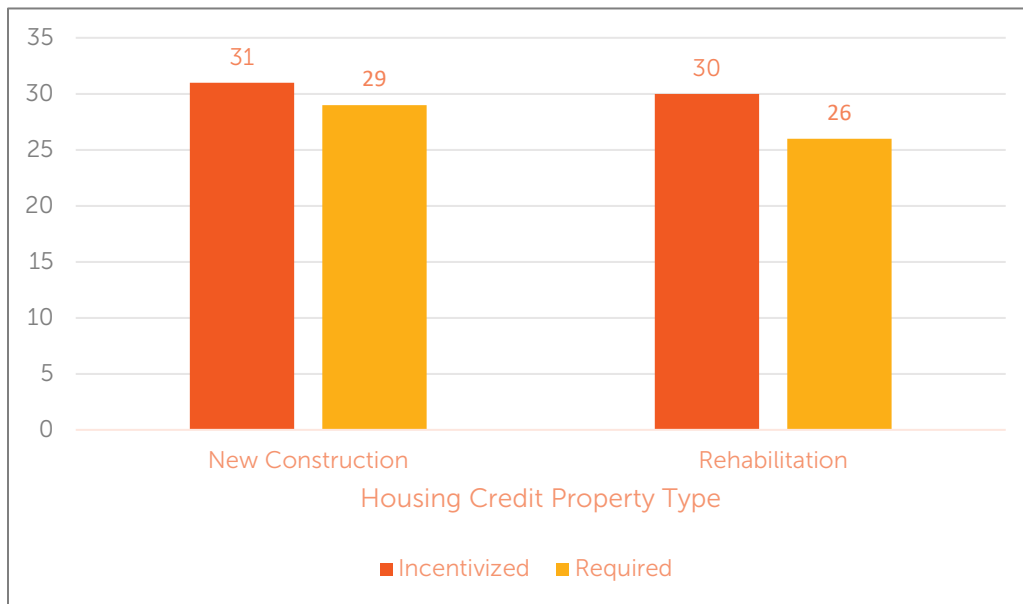
Tailoring Requirements to New Construction vs. Rehabilitation Projects

Many HFAs apply green building requirements or incentives to both new construction and rehabilitation projects. Of the 46 HFAs that incorporate a green building standard in their QAP, 26 HFAs require both rehabilitation and new construction properties to be green building standard-certified. Three HFAs -- Kansas, Missouri, and Virginia -- require only new construction projects to achieve a green building standard certification. (see Figure 3 below).

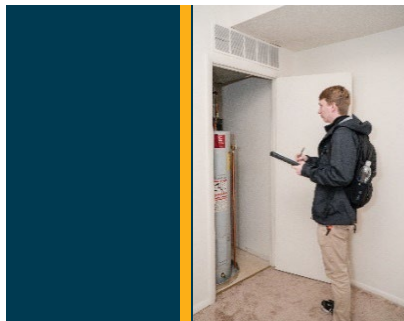
26 OUT OF 53 HFAs

require both rehabilitation and new construction properties to be green building standard certified.

FIGURE 3: Number of QAPs that Require or Incentivize Green Building Standards by Property Type (2023)



In selecting and applying green building requirements, HFAs must recognize the differences in achieving sustainability standards in new construction and rehabilitation projects. It is generally more difficult for building owners to achieve advanced sustainability standards, such as Passive House, for existing buildings compared to new construction. Requiring or incentivizing the same rigorous standards for both property types can inadvertently discourage rehabilitation projects by requiring them to compete with new construction projects for Housing Credits.



Auditing Building Components at R Street Apartments, Washington, D.C.

NHT's analysis found at least seven HFAs vary green building incentives or requirements to level the playing field between new construction and rehabilitation projects. For example, Ohio and Pennsylvania require or incentivize different green building standards for different project types. Ohio requires new construction projects to achieve either EGC, LEED or NGBS but allows developers to follow the Ohio Housing Finance Agency's Limited Scope Rehab Sustainability Standards as an alternative pathway for rehabilitation projects.

7 OUT OF 53 HFAs

vary green building standard incentives or requirements between new construction and rehabilitation projects.

Pennsylvania awards points for new construction projects that achieve green building standards through EGC 2020, LEED v4 Silver (Building Design and Construction) and NGBS Silver. Both new construction and preservation projects can also receive additional points through achieving Passive House or ZERH standards. While Pennsylvania offers the same number of points for preservation projects, the HFA allows those developments to achieve certification under alternative pathways, specifically EGC 2020's existing building pathway, LEED v4 (Operations and Maintenance) or NGBS Bronze. By better aligning the standard to the property type, Pennsylvania offers existing buildings an opportunity to achieve a more appropriate and reasonable level of energy and water efficiency.

Green Building Standards in the Inflation Reduction Act (IRA)

The Inflation Reduction Act references several of the green building standards used by HFAs.

- The HUD Green and Resilient Retrofit Program (GRRP) provides grants and loans to fund projects that improve energy or water efficiency, enhance indoor air quality or sustainability, implement the use of zero-emission electricity generation, low-emission building materials or processes, energy storage, or building electrification strategies, or address climate resilience, of eligible HUD-assisted multifamily properties. To achieve higher levels of funding, projects must achieve one of several certifications, including the net zero pathways of NGBS, EarthCraft, Passive House, Energy Star, LEED, ZERH, and International Living Futures Institute.
- The 45L New Energy Efficiency Home Credit provides \$500-\$5,000 per dwelling unit, depending on performance level and labor standards. Projects must achieve at least Energy Star Multifamily New Construction certification to be eligible for incentives. Projects that achieve DOE's ZERH certification are eligible to receive the highest incentive amount





State or Local Green Building Pathways

In addition to the third party green building standards described in this brief, many states also offer Housing Credit applicants additional points or a pathway to achieve sustainability goals through a separate menu of energy and water efficiency, sustainability, healthy buildings materials criteria, and more. This approach allows states to highlight certain sustainability policies, priorities and goals outside of the broader green building standards. Connecticut, as one example, incentivizes EGC, LEED, NGBS or Energy Star as green building standards and also provides points for specific sustainable design measures, including water conservation, energy benchmarking, the use of renewable energy and certain healthy building materials.

Some jurisdictions have elected to elevate the performance of buildings through adoption of stronger building codes or other provisions that augment green building standards outside of the nationally-recognized green party standards. Minnesota's B3 Sustainable Building 2030 (SB 2030) is a "progressive energy conservation program," based on national standards, but tailored to the needs of Minnesota buildings. Sponsored by the Minnesota Departments of Administration and Commerce, the SB 2030 standards are required on State-funded projects in Minnesota. The program sets specific energy performance targets for energy use in buildings, comparing present-day energy use to representative buildings' energy use from 2003. To comply with the SB 2030 standard, Housing Credit applicants must incorporate a combination of on-site renewable energy generation and property-wide energy efficiency measures. Both new construction and rehabilitation projects are incentivized to meet the SB 2030 standards in the QAP.

Chicago, Florida, Washington and Wisconsin have also developed their own state- or locality-specific standards, separate from the nationally recognized green building standards.

Conclusion

The use of green building standards in the Housing Credit program is increasingly widespread as HFAs recognize the value of embedding sustainability priorities in their funding criteria. Additionally, there has been an increase in the array of standards HFAs incorporate in their programs – many of which also figure prominently in IRA energy efficiency programs.

HFAs utilize different approaches to incorporate green building standards in their Housing Credit programs, reflecting differences in HFAs' sustainability priorities, their climate and affordability goals, and the regional nature of affordable housing development. At present, few HFAs consider the importance of differentiating standards for new construction and rehabilitation, and greater consideration is urged in the future to ensure that aims of improving sustainability in affordable housing do not inadvertently disadvantage rehabilitation projects that would modernize and preserve existing housing stock. The integration of green building standards has had an enormous impact on creating and preserving healthier and more resilient affordable homes around the country for lower income residents, and deliver benefits for those who are often most at risk of the impacts of a changing climate.

Learn more about how QAPs can accelerate the affordability, opportunities, and sustainability of affordable housing on our [QAP analysis home page](#).

TABLE 1: Third Party Green Building Certifications by Housing Type and by State

State	New Construction		Rehabilitation		Reference Standards
	Incentive	Required	Incentive	Required	
AK	X		X		5 Star Plus BEES (IECC 2018 & ASHRAE 62.2, & Alaska Specific Amendments), IECCC 2018
AZ	X				EGC, NGBS, ZERH or Passive House
CA	X	X	X	X	LEED, Greenpoint, EGC, Phius, Passive House, Living Buildings, NGBS, WELL
Chicago	X	X	X	X	Chicago Sustainable Development Policy
CO		X		X	EGC, NGBS, LEED, ZERH, Passive House, Phius
CT	X	X	X	X	EGC, LEED, NGBS, Living Building Challenge Core Ready
DC		X		X	EGC, LEED
DE	X		X		EGC, NGBS, LEED, Passive House, ZERH
FL		X		X	LEED, Florida Green Building Coalition, EGC, NGBS
GA		X		X	EarthCraft, NGBS, EGC, LEED, GBI Green Globes
HI		X		X	Energy Star, EGC, LEED, NGBS
IA	X		X		Energy Star, Iowa Green Streets
ID	X	X	X	X	EGC, NGBS, LEED, Passive House, Phius, ZERH, Energy Star
IL	X	X	X	X	EGC, Net Zero Certification, LEED, NGBS, Living Building Challenge, International Living Futures Core Green Building Certification, Phius CORE
IN	X		X		LEED, NGBS, EGC, Passive House
KS		X			IECC or Energy Star
LA		X		X	LEED, EGC, NGBS, EarthCraft
MA	X	X	X	X	EGC, LEED, Passive House, Phius
MD	X	X	X	X	EGC, LEED, NGBS, EarthCraft, Green Globes, ZERH, Energy Star
MI	X	X	X	X	NGBS, LEED, EGC, Passive House
MN ⁵	X	X	X	X	Minnesota B3 Sustainable Building 2030 Energy Standard, ZERH, Passive House, Phius, EGC, International Living Futures, Energy Star
MO		X			EGC, LEED, NGBS
MS	X		X		NGBS, EGC, Fortified MF Gold
MT	X		X		Passive House, Phius
NC		X		X	Energy Star
ND	X		X		EGC, LEED, NGBS
NE	X	X	X	X	Energy Star, EGC, NGBS, LEED
NH		X		X	Passive House, International Living Futures, LEED, NGBS, EGC
NJ	X	X	X	X	EGC, LEED, NGBS, Climate Choice Homes Program, Living Building Challenge, Passive House, ZERH, Energy Star
NV		X		X	Energy Star
NY		X		X	Energy Star, EGC, LEED, WELL, NGBS
NYC		X		X	Green Communities Criteria, LEED
OH		X		X	EGC, LEED, NGBS, OHFA Limited Scope Rehab Sustainability Standards
OR		X		X	EGC, Earth Advantage
PA	X	X	X	X	EGC, LEED, NGBS, ZERH, Passive House
RI	X		X		NGRID RNC, Energy Star, Net Zero, Passive House
SC	X		X		EGC, LEED, NGBS, EarthCraft, CHIIP HOME Program
SD	X		X		Energy Star
TX	X		X		EGC, LEED, NGBS, International Green Construction Code
UT	X		X		EGC, ZERH, Green Globes, LEED, Passive House, WELL
VA	X	X	X		Energy Star, EarthCraft, LEED, NGBS, EGC, ZERH
VT	X		X		Passive House, Net Zero
WA	X	X	X	X	Evergreen Sustainable Development criteria
WI	X		X		Wisconsin Green Built Home Standard, EGC, LEED
WV	X		X		Energy Star
WY	X		X		Energy Star

⁵ Minnesota does not require Enterprise Green Certification, but developers must meet required Mandatory criteria and minimum Optional points criteria based on construction type.