

A Policymaker's Guide:

The National Green Building Standard & LEED Comparison

National Green Building Standard

NGBS

Leadership in Energy & Environmental Design

LEED

There are many credible regional and national rating systems to which policymakers can refer when developing a public green building initiative. Indeed, one way to ensure the success of a green program is to allow participants a choice among rating systems. As long as each system meets the desired sustainability goals, added flexibility will encourage broader participation without compromising the program's purpose.

The ICC 700 National Green Building Standard (NGBS) and the LEED residential rating systems (LEED-H & LEED-ND) are the two best-known green building protocols in the United States. Both provide guidance on building greener homes and communities, and both have been referenced in public green initiatives.

In many ways the two programs are quite similar. There are also several key differences that anyone considering the programs should understand.

Goal to Improve Energy & Water Efficiency, Durability, Indoor Environmental Quality, Land Development and Owner Education	✓	✓
Exceeds Code Requirements	✓	✓
Tiered System	✓	✓
ANSI Approved Standard	✓	
Single Standard Applies to All Types of Residential Buildings and Land Development Projects	✓	
Facilitates and Optimizes Sustainability in All Types of Development	✓	
Minimizes Certification Costs While Maximizing Sustainable Results	✓	
Increased Performance in All Areas Required to Achieve a Higher Rating	✓	



- 1) **Both the National Green Building Standard (NGBS) and Leadership in Energy & Environmental Design (LEED) seek to address the same green building principals even if the terms they use differ.** Both focus on minimizing a home's impact on the land, better energy and water efficiency, durability, better indoor environmental quality and educating homeowners about proper operation and maintenance of their home's components.
- 2) **Both are "above-code" systems.** Each program rewards green building innovation and helps meet policy goals related to housing performance. Of course, homes complying with either system usually cost more to build and buy than older homes or new, non-green homes, and today's cost-conscious buyer often won't pay a premium for expected future utility and maintenance savings. Accordingly, any public green building initiatives should be voluntary in nature and provide rebates or other incentives to offset any additional costs to meet program goals.
- 3) **Both are tiered systems,** each requiring a mix of mandatory and discretionary practices related to the underlying principles of green building to achieve specific thresholds. The discretionary component of both programs helps to make them applicable across varied geographies, climates and economies.
- 4) **NGBS is ANSI approved. LEED is not.** The American National Standards Institute (ANSI) has determined that the NGBS has undergone thorough public review and meets the requirements of a true consensus standard. It complies with the National Technology Transfer and Advancement Act of 1995 (OMB Circular A-119) requiring federal agencies to recognize and incorporate existing consensus standards in policy initiatives. LEED may not.
- 5) **NGBS was designed to rate all types of residential buildings and land development. LEED-H and LEED-ND were not.** NGBS can be used to rate new single and multifamily homes as well as the renovation and remodeling of existing residential buildings. It also incorporates a standalone rating system specifically for residential land development. The LEED-H system is primarily applied to new construction and it has no standalone rating system for land developers. LEED-ND is not focused on residential development and is most readily applied to urban areas with access to comprehensive transit systems.
- 6) **NGBS is suitable for all types of residential development projects. LEED is not.** NGBS promotes environmentally sensitive site planning approaches, such as respecting natural topography and contours and using innovative wastewater treatment systems. LEED-ND is essentially an urban design guide with a narrow focus on high-density infill settings, so it is not applicable in many areas of the country. It does not award points for many recognized sustainable development practices. In fact, many of its prerequisites preclude their use.
- 7) **Certification to the NGBS was developed with affordability in mind.** For example, the fees for NGBS certification of a green community are \$2,500 for 1-10 lots, \$5,000 for 11-24 lots, and \$6,250 for more than 25 lots plus the fees established by the independent local verifier. By contrast, the base registration fee for a LEED-ND community application is \$1,500 plus a certification fee if the community achieves a certification level. These fees vary based on the acreage of the project, starting at \$18,000 for a 3.5 acre site (minimum size). For sites 300+ acres, the fee is \$123,000.
- 8) **NGBS requires increased effort in all areas to achieve higher levels. LEED does not.** Both programs have mandatory practices. And both programs require accruing more points to meet higher thresholds. However, only NGBS requires that more points be earned in all categories (energy and water efficiency, lot development, etc.) to advance to a higher level. This means that a home that achieves a Silver NGBS score is greener in every way than a home that achieves Bronze. Meanwhile, a home scoring at the higher levels in the LEED program needn't necessarily improve performance in all categories. In fact, it's possible to achieve a Platinum rating in the LEED-H program with no further emphasis on energy efficiency than is required to meet the lowest level (Certified).