



September 4, 2019

Chris Austin
Director of Rental Investment
North Carolina Housing Finance Agency
3508 Bush Street
Raleigh, NC 27069

Submitted via email to rentalhelp@nchfa.com

RE: 2020 NC Draft Qualified Allocation Plan (QAP) and Potential Inclusion of the ICC/ASHRAE-700 National Green Building Standard (NGBS)

Dear Mr. Austin:

On behalf of Home Innovation Research Labs, I respectfully request that the 2020 North Carolina Qualified Allocation Plan (QAP) be amended to incorporate recognized third-party green building programs, including the **ICC/ASHRAE – 700 National Green Building Standard (NGBS)** as optional criteria for funded developments.

The current draft QAP requires that new construction projects meet the ENERGY STAR 2.0, which is a dated program version that is no longer available for building certification. NCHFA has an opportunity to incorporate current energy efficiency and/or green building requirements while recognizing third-party certification programs that are already widely accepted across North Carolina.

There are many compelling reasons why the North Carolina Housing Finance Agency should recognize NGBS Green. First, the NGBS was specifically designed for residential projects including affordable housing, and is cost-effective to implement, making it ideally suited for low-income housing programs to meet their goal of increasing the construction or renovation of green housing in a cost-conscious manner. Second, the NGBS's credibility as a green building rating system is unassailable given it carries ANSI approval as an American National Standard, as well as approval as an ASHRAE Standard and an ICC Standard. No other green building rating system or certification program in the country can match the NGBS's credibility in that regard, and thus OHCS can be assured that the NGBS is a true consensus-based standard, developed by a balance of stakeholders, rigorous in its compliance requirements, that has undergone the scrutiny of extensive public review and comment. Last, the NGBS is recognized in 22 state Qualified Allocation Plans for low income housing tax credits and innumerable federal, state, and local affordable housing programs, making NGBS Green particularly appropriate for affordable housing.

National Green Building Standard Overview

The NGBS is the first and only residential green building rating system to undergo the full consensus process and receive approval from the American National Standards Institute (ANSI). The original 2008 version was approved by ANSI in 2009; the 2012 version was approved by ANSI in early 2013; and the 2015 edition was approved in March 2016. The 2008 and 2012 NGBS versions were jointly developed by the National Association of Homebuilders (NAHB) and the International Code Council (ICC). For the third edition of the standard, the 2015 version¹, ASHRAE joined as a third co-sponsor. This partnership further cements the NGBS as the preeminent green standard for residential construction.

The NGBS carries three important designations. It is ANSI-approved as an American National Standard. It is also part of the family of ICC International-codes (I-Codes) that form a complete set of comprehensive and coordinated building codes. Last, it is approved as an ASHRAE Standard.

As one of the I-Codes, the NGBS is written in code language to make it easy for industry professionals and contractors to understand. I believe this is one reason the NGBS has been successful even in areas where it is not part of the building code and is used as an above-code program. For a residential building to be in compliance, the building must contain all mandatory practices in the NGBS. The building must also contain enough practices from each of the six categories of green building practices to meet the required threshold points.² The six categories of green practices are:

- Lot & Site Development
- Resource Efficiency
- Energy Efficiency
- Water Efficiency
- Indoor Environmental Quality
- Homeowner Education

Under the NGBS, homes and multifamily buildings can attain one of four potential certification levels: Bronze, Silver, Gold, or Emerald. The NGBS was specifically designed so that no one category of green practices is weighted as more important than another. Peerless among other green rating systems, the NGBS requires that all projects must achieve a minimum point threshold in every category of green building practice to be certified. A project certified to the NGBS can't merely obtain all or most of its points in a few categories, as other rating systems allow. This requirement makes the NGBS the most rigorous green building rating systems available.

¹ More information at www.homeinnovation.com/ngbs

² See page 12 in ICC 700-2012 NGBS.

The NGBS's mandatory provisions must be met for certification at any level. There are no exemptions. However, unlike other green building rating systems, the NGBS contains an expansive array of green building practices aimed at all phases of the development process: design, construction, verification, and operation. This provides the flexibility builders and developers need to ensure their green projects reflect their geographic location, climatic region, cost constraints, and the type of project they are constructing.

Certification Program

Home Innovation Research Labs serves as Adopting Entity and provides certification services to the NGBS. Home Innovation Labs is a 55-year old, internationally-recognized, accredited product testing and certification laboratory located in Upper Marlboro, Maryland. Our work is solely focused on the residential construction industry and our mission is to improve the affordability, performance, and durability of housing by helping overcome barriers to innovation. Our core competency is as an independent, third-party product testing and certification lab, making us uniquely suited to administer a green certification program for residential buildings. Our staff is made up of mechanical, structural, and electrical engineers; planners; economists; architects; former builders, remodelers, and contractors; lab and technicians. Combined, they possess an unparalleled depth of knowledge and experience in all facets of market analysis and building science research and testing. Why is that important? Because behind every building seeking NGBS compliance stands a team of experts on a mission to help them succeed. Participation in NGBS Green brings our building science expertise to each project team at no additional cost.

Independent, Third-Party Verification

The NGBS requires that a qualified, independent third-party inspect the project and verify that all green design or construction practices claimed by the builder toward green certification are incorporated correctly into the project. Most projects require at least two inspections. The verifier must perform a rough inspection before the drywall is installed to observe the wall cavities, and a final inspection once the project is complete. The required verification offers imbues an elevated level of rigor and quality assurance to the projects that are certified. An affordable housing organization can be assured that construction practices for higher building performance and healthier residences are successfully achieved.

Verifiers record the results of their rough and final inspections on a Verification Report, which is submitted to Home Innovation Research Labs. Home Innovation reviews every rough and final inspection to ensure national consistency and accuracy in the verification reports. After the Verification Reports are reviewed and approved, our team issues green certification to the project.

Home Innovation Research Labs qualifies, trains, tests, and accredits the NGBS Green Verifiers and maintains a current list at www.HomeInnovation.com/FindNGBSVerifier. Verifiers must possess experience in residential construction and green building. Many verifiers are Home Energy Rating System (HERS) raters. Potential verifiers are trained on how to verify every NGBS practice. After completing the training, verifiers must pass a three-part exam and carry appropriate insurance to earn accreditation. Verifiers renew their accreditation annually and retrain and retest with every NGBS version.

Home Innovation maintains strict rules to ensure verifiers remain independent and free of conflict-of-interest on the projects for which they provide verification services. Verifiers serve as our field agents to confirm buildings are NGBS compliant. Further, we regularly audit our verifiers and their verifications as part of our internal quality assurance program.

Two Mandatory Inspections

To earn NGBS Green certification, every green project is subject to two independent, third-party verifications. There is no self-certification in our program. Builders must hire an independent, accredited verifier who is responsible for visual inspection of every green building practice in the home or dwelling unit. The verifier must perform a rough inspection before the drywall is installed in order to observe the wall cavities, and a final inspection once the project is complete. The required verification imbues a high level of rigor and quality assurance to the program and to the projects that are certified.

Home Innovation qualifies, trains, and accredits building professionals to provide independent verification services for builders. Verifiers must first demonstrate that they possess experience in residential construction and green building before they are eligible to take the verifier training. Many verifiers are HERS raters and/or LEED raters. Potential verifiers must complete thorough training on exactly how to verify every practice in the **National Green Building Standard**. After completing the training, verifiers must pass a three-part written exam with an 80% pass rate and demonstrate that they carry sufficient liability insurance before receiving Home Innovation accreditation. Verifiers must have their accreditation renewed yearly and must retrain and retest with every revised edition of the NGBS.

Verifiers serve as our in-field agents to confirm buildings are NGBS compliant. Home Innovation Labs reviews every rough and final inspection to ensure national consistency and accuracy in the verification reports. Further, we regularly audit our verifiers and the verifications that they perform as part of our internal quality assurance program.

Why is third-party verification important? Simply because it is the only reliable way to ensure that the project will be a high-performing, green project post-construction. Our verifiers report that the most common inspection issue they encounter in the field is improperly installed insulation. However, because our Verifiers inspect every unit they are in the building before the drywall is installed and they can help the builder or contractor take the necessary corrective action before it is too late to correct.

QAP Recognition of the NGBS

The National Green Standard is currently recognized in 22 state Qualified Allocation Plans (QAPs), and an increasing number of State Housing Finance Agencies have been adding NGBS green certification to their QAPs to help promote green affordable housing. In these plans, NGBS is recognized as on-par with comparable programs, such as LEED and Enterprise Green Communities, and other regional programs such as Earth Advantage. Multifamily builders who utilize NGBS for low-income housing tax credits typically receive the same number of points for NGBS as they would for an alternative program. The straight-forward and low-cost nature of the NGBS certification program make it ideally suited for affordable housing development, and this is evident by the number of Habitat for Humanity organizations and other LIHTC providers who select NGBS as their program of choice.

Program Statistics to Date

Home Innovation has certified 4,314 multifamily buildings representing 167,185 dwelling units. Currently, there are 2,519 multifamily buildings in progress, representing an additional 126,444 dwelling units.

While we don't specifically track the number of projects that are affordable housing, we have certified many LIHTC projects as well as other affordable and workforce housing developments. I believe that this indicates we have been successful in designing a green certification program that is affordable and flexible, while remaining rigorous.

NGBS Activity in North Carolina

North Carolina is a top state for NGBS Green certification activity. In fact, nearly 1 in 3 NGBS Green Certified single-family homes are located in North Carolina! Home Innovation has also certified 433 multifamily buildings, representing over 19,000 dwelling units, throughout the state. There are currently 240 multifamily buildings, representing another nearly 12,000 dwelling units, in process for certification. These statistics should signify that the local building industry is familiar with green building practices and familiar with the NGBS Green certification requirements and process.

Summary

The goal of the NGBS and the Home Innovation NGBS Green Certification Program is to recognize projects that reach exceptional levels of sustainable design. We have worked hard to develop a program that removes as many barriers as possible to high-performance green buildings without eliminating any of the rigor or verification necessary to ensure compliance. To this end, we have kept our certification fees low, minimize the time needed for interpretations and project review, and significantly reduced the costs required to incorporate green practices. I respectfully request that NGBS Green be recognized as an optional green building certification in North Carolina's 2020 Qualified Allocation Plan.

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We look forward to discussing it further with you or staff if you require a more detailed overview of the NGBS or the green certification program. We will also gladly send you any supplemental information that you might require for further support. Please don't hesitate to contact Michelle Foster (mfoster@homeinnovation.com, 301.430.6205), our Vice President, Innovation Services, directly if she can be of further assistance.

I look forward to working with you to promote green certified housing built to the ***National Green Building Standard***.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Luzier". The signature is fluid and cursive, with a large, stylized "M" and "L".

Michael Luzier
President and CEO