



August 26, 2022

South Carolina State Housing Finance & Development Authority
300 Outlet Pointe Blvd C,
Columbia, SC 29210

Submitted electronically: taxcreditquestions@schousing.com

Dear SC Housing team,

On behalf of Home Innovation Research Labs, I am pleased to submit comments regarding SC Housing's Draft 2023 Qualified Allocation Plan (QAP).

We praise SC Housing for maintaining competitive points for third-party green building certification. We especially praise SC Housing for incentivizing certification to the *ICC-700 National Green Building Standard (NGBS)*.

This letter includes an overview of Home Innovation's NGBS Green certification program, including market and policy acceptance and certification activity.

Praise for Green Building Criteria

We praise SC Housing for maintaining competitive points for third-party green building certifications. The Green Building Features criteria encourages development that is efficient, comfortable, and supports resident health.

Comprehensive green building standards support true housing affordability and ensure that funded buildings are designed to support the comfort and health of residents. Further, by recognizing multiple green building rating systems, SC Housing is empowering applicants to pursue their program of choice. We respectfully request that these options be retained in the final QAP.

In particular, we commend SC Housing for recognizing NGBS Green certification based on the *ICC-700 National Green Building Standard (NGBS)*. The NGBS was specifically designed for residential projects and is affordable to implement, making it ideally suited for low-income housing programs.

National Green Building Standard Overview

The NGBS was the first residential green building rating system to undergo the full consensus process and receive approval from the American National Standards Institute (ANSI). Since 2008, each version of the NGBS has been approved by the American National Standards Institute (ANSI). The 2008, 2012, and 2020 versions were developed with support from the National Association of Home Builders (NAHB) and the International Code Council (ICC). For the third edition of the standard, the 2015 version, the American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) participated as a third co-sponsor. This partnership further cements the NGBS as the preeminent green standard for residential construction.

The NGBS is also the first solely residential green building standard to be one of the ICC suite of I-codes that form a complete set of comprehensive and coordinated building codes. As the industry standard for green residential development, it is embedded within the International Green Construction Code (IgCC) as an alternative compliance path for multifamily residential buildings and the residential portion of mixed-use buildings. Finally, the NGBS is also 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.¹ 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 See page 12 in ICC 700-2020 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 58-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 an exam and carry sufficient 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.

QAP Recognition of the NGBS

The National Green Standard is currently recognized in nearly 30 state and local 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 9,687 multifamily buildings representing 350,894 dwelling units. Currently, there are 6,744 multifamily buildings in progress, representing an additional 346,812 dwelling units. I believe that these statistics show that we have been successful in designing a green certification program that is affordable and flexible, while remaining rigorous.

Summary

Thank you for the opportunity to provide feedback on South Carolina' 2023 Draft QAP. We applaud SC Housing for maintaining optional green building criteria that references credible third-party green building programs.

August 26, 2022

Page 5

I am happy to meet with you or your staff should you require a more detailed overview of the NGBS or our certification program. I will also gladly send you any supplemental information that you might require. Please do not hesitate to contact Michelle Foster [REDACTED], our Vice President of Sustainability, directly if she can be of further assistance.

I look forward to working with you to promote green certified affordable housing in South Carolina.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Luzier". The signature is fluid and cursive, with the first name "Michael" being more prominent than the last name "Luzier".

Michael Luzier
President & CEO