

July 29, 2014

Baltimore City Planning Commission  
417 E. Fayette St., 8<sup>th</sup> Floor  
Baltimore, MD 21202

Submitted electronically: [tom.stosur@baltimorecity.gov](mailto:tom.stosur@baltimorecity.gov); [wolde.ararsa@baltimorecity.gov](mailto:wolde.ararsa@baltimorecity.gov)

**SUBJECT:** City of Baltimore Council Bill 14-0413

Dear Planning Commissioners:

On behalf of Home Innovation Research Labs, I write to propose that Baltimore City retain the option for the *ICC 700 National Green Building Standard™* (NGBS) to be considered an alternative pathway for residential buildings to demonstrate compliance with the Baltimore City Revised Code. This alternative compliance path is significant for builders and developers of residential projects to provide a more flexible and affordable (but no less rigorous) compliance path.

I believe that there are several reasons why Baltimore City should allow NGBS as an alternative compliance option. First, and most importantly—the NGBS is the only alternative compliance noted in the original IgCC adopted by ICC<sup>1</sup>, which is evidence that the rating system is a valid and credible option for residential construction. Second, the NGBS is as rigorous, if not more rigorous, than LEED, which is currently included in the draft Baltimore City Revised Code. Lastly, the NGBS is more flexible and cost-effective to implement than LEED, which makes it ideally suited for communities seeking to increase the construction of green housing in a cost-effective manner.

In addition, I request that Home Innovation Research Labs' third-party certification to the NGBS be accepted as proof of alternative compliance. This option would streamline permitting for multifamily developers who already seek green certification through Home Innovation for the value that it provides to investors and potential renters/buyers. Home Innovations' NGBS Green certification program is the program of choice for multifamily developers in Maryland as it is affordable, flexible, and rigorous. Adoption of this alternative compliance path would offer consistency with other jurisdictions within the region. The District of Columbia has adopted a modified version of the IgCC, which allows projects greater than 10,000 square feet to seek one of four third-party certifications<sup>2</sup> to satisfy the Green Construction Code requirements. Montgomery County is also expected to recognize the NGBS as an alternative compliance option when they adopt the IgCC<sup>3</sup>.

### **Overview of the National Green Building Standard**

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, and the 2012 version was approved by ANSI in early 2013. Both 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, which is currently

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<sup>1</sup> Chapter 1 Scope and Administration Section 101.3.1

<sup>2</sup> LEED, Enterprise Green Communities, ASHRAE 189.1, or NGBS

<sup>3</sup> <http://permittingservices.montgomerycountymd.gov/DPS/pdf/ProposedAmendmentsToIgCCChapters1-3.pdf>

underway<sup>4</sup>, ASHRAE has joined as a third co-sponsor. This partnership further cements the NGBS as the preeminent green standard for residential construction.

The NGBS carries two 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, coordinated building safety and fire prevention codes.

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 (See page 12 in ICC 700-2012 NGBS). The six categories of green practices are:

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

### **Certification Program**

Home Innovation Research Labs serves as Adopting Entity and provides certification services to the NGBS. Home Innovation Labs is a 50-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.

### **Two Mandatory Inspections**

To be certified to the NGBS, 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 NGBS. After completing the training, verifiers must pass a written exam and demonstrate that they carry sufficient liability insurance before receiving

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<sup>4</sup> More information at [www.homeinnovation.com/ngbs](http://www.homeinnovation.com/ngbs)

Home Innovation accreditation. Verifiers must have their accreditation renewed yearly. They serve as our in-field agents to verify buildings are built in compliance with the NGBS.

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.

### **Credibility and Rigor**

Under the NGBS, 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 was 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 at this time.

Several studies have been completed to demonstrate the affordability and/or rigor of the NGBS. *Green Home Building Rating Systems – A Sample Comparison*<sup>5</sup> evaluates the costs and technical requirements of bringing two sample code-compliant production houses in different climate zones into compliance with the NGBS and LEED for Homes. AIA Cincinnati published a report comparing the NGBS and LEED for Homes<sup>6</sup> that found the programs to be essentially equivalent in rigor, but the NGBS to be more affordable and easier to use. The Home Builders Association of Greater Chicago released an independently prepared report<sup>7</sup> evaluating the additional costs required to elevate three sample code-compliant, urban, residential building types in the City of Chicago into compliance with the Chicago Green Homes Program (CGH), the NGBS, and LEED-H.

### **Legislative and Regulatory Parity with LEED**

The NGBS was developed after the USGBC's LEED rating systems; therefore, LEED is more commonly recognized in legislative and regulatory initiatives. However, since 2009 when ANSI first approved the NGBS, we have found that without exception the NGBS has been considered as on par or more stringent than LEED as a green building rating system for residential projects. On the federal level, HUD has recognized the NGBS as on par with LEED. For example, in their recent funding notice for jurisdictions affected by Hurricane Sandy they cite the NGBS as an acceptable green building standard for reconstruction efforts. In New York State, NYSERDA provides financial incentives for residential buildings certified to the Silver level of either the NGBS or LEED. Delaware State also provides financial incentives for homes built to the Silver level of either the NGBS or LEED in its Green for Green program. In New Mexico, homes certified to either the NGBS or LEED can qualify for the generous State tax credit program. To date, not a single jurisdiction has refused to recognize the NGBS as an alternative compliance path for any regulatory or incentive program where we have asked them to make an

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<sup>5</sup> [www.homeinnovation.com/services/certification/green\\_homes/resources/~media/Files/Reports/2012\\_NGBS\\_Cost\\_Comparison.ashx](http://www.homeinnovation.com/services/certification/green_homes/resources/~media/Files/Reports/2012_NGBS_Cost_Comparison.ashx)

<sup>6</sup> [www.aiacincinnati.org/community/LEED\\_NAHB\\_Sum.cfm](http://www.aiacincinnati.org/community/LEED_NAHB_Sum.cfm)

<sup>7</sup> [www.homeinnovation.com/services/certification/green\\_homes\\_and\\_products/multifamily\\_certification/~media/Files/Reports/UrbanGreen\\_BuildingRatingSystemsCostComparison.ashx](http://www.homeinnovation.com/services/certification/green_homes_and_products/multifamily_certification/~media/Files/Reports/UrbanGreen_BuildingRatingSystemsCostComparison.ashx)

equivalency decision. For a more complete listing of where the NGBS has been recognized, please visit our summary of incentives<sup>8</sup>.

### **Certification Activity**

Home Innovation has certified approximately 9,256 projects to date, including 1,085 multifamily buildings representing 28,199 dwelling units. I believe that this indicates that we have been successful in designing a green certification program that is affordable and flexible, while remaining rigorous.

In Maryland, the NGBS has been recognized at the state-level in *HB630 Building Standard-High-Performance Homes*, which defined high-performance homes as those meeting or exceeding Silver-level certification to either LEED-H or NGBS. At the local level, Anne Arundel, Baltimore, and Howard counties all offer tax credits to new or renovation NGBS homes/buildings. Given the choice, Maryland builders have widely selected NGBS. In 2013, Maryland ranked #7 in the nation for NGBS certifications.

### **Summary**

The NGBS produces projects that reach exceptional levels of sustainable design and construction. With an over five-year proven track record of improving the performance of residential buildings nationwide, I recommend that Baltimore City recognize Home Innovation Research Labs' third-party certification to the NGBS as an alternative pathway for buildings to demonstrate compliance with the Baltimore City Revised Code.

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 don't hesitate to contact Michelle Desiderio ([mdesiderio@homeinnovation.com](mailto:mdesiderio@homeinnovation.com), 301.430.6205), our Vice President of Innovation Services, directly if she can be of further assistance.

I look forward to working with Baltimore City to promote green housing built to the *ICC 700 National Green Building Standard*<sup>TM</sup>.

Best,



Michael Luzier  
President and CEO

cc: Kathleen Bryne, Deputy Assistant Commissioner, Department of Housing  
Alice Kennedy, Sustainability Coordinator, Office of Sustainability  
Michael Harrison, Home Builders Association of Maryland

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<sup>8</sup> [www.homeinnovation.com/ngbsgreenincentives](http://www.homeinnovation.com/ngbsgreenincentives)