

May 24, 2022

Stoyan Bumbalov  
Washington State Building Code Council  
1500 Jefferson Street SE  
Olympia, WA 98504

Dear Mr. Bumbalov and members of the Building Code Council Technical Advisory Group:

We are writing to provide input on two proposals before the Building Code Technical Advisory Group (TAG) submitted by the New Buildings Institute (NBI): “Greenhouse Gas Emissions Reductions for Steel Products” and “Concrete Greenhouse Gas Emissions Reductions”.

Our organizations are part of a diverse coalition that has played an active role for the past two years in a developing legislative proposal known as Buy Clean and Buy Fair, championed by Representative Duerr and Senator Stanford. NBI’s proposals and Buy Clean are structured differently but share the same end goal: increase procurement of low-carbon materials.

We are thrilled at the growing momentum behind such material approaches to reducing embodied carbon, which are a key step in decarbonizing the built environment and strengthening low-carbon materials manufacturing. However, we have concerns about NBI’s proposals in their current form.

Based on our stakeholder engagement on Buy Clean and Buy Fair, we have identified several components that are critical for a successful materials-focused embodied carbon policy: material neutral, supply-chain specific data requirements, clear reporting parameters, project thresholds, structured phase-in, and centralized reporting. Many of these components are missing from NBI’s proposals.

With this in mind, we make the following recommendations:

- 1. Include all structural materials.**

Structural materials account for 80 percent of a building’s embodied carbon footprint.<sup>1</sup> As a result, they are a logical place to start with any materials-focused embodied carbon regulation. However, it is important to act on all structural materials simultaneously: concrete, steel, and wood products. NBI’s proposals single out concrete and steel. This creates unfair competition and may inadvertently impact material choice, rather than promoting procurement of low-carbon materials *within* material categories as intended.

- 2. Outline clear reporting parameters.**

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<sup>1</sup> Urban Land Institute, Embodied Carbon in Buildings Materials for Real Estate. 2019. Available online: [https://2os2f877tnl1dvtmc3wy0aq1-wpengine.netdna-ssl.com/wp-content/uploads/ULI-Documents/Greenprint-EmbodiedCarbon-Report\\_FINAL.pdf](https://2os2f877tnl1dvtmc3wy0aq1-wpengine.netdna-ssl.com/wp-content/uploads/ULI-Documents/Greenprint-EmbodiedCarbon-Report_FINAL.pdf).

Three sets of reporting parameters are missing from NBI's proposals that are vital to ensure that data is consistent and comparable: 1) supply-chain specific data requirements for environmental product declarations; 2) covered product definitions; and 3) applicable product category rules.

The product life cycle assessment reported in an environmental product declaration can be based on two types of data: 1) data from the actual facilities in the product's supply chain, known as supply-chain specific data; and 2) industry average data. The more supply-chain specific data used in a life cycle assessment, the more accurate a representation it is of the actual product. We recommend requiring supply-chain specific data for processes that contribute to 80% or more of the product's cradle-to-gate global warming potential.

NBI should also elaborate covered product definitions using applicable material industry standards and create a list of applicable product category rules. If these policies move forward, the State Building Code Council should consider strategies to maintain a current list of applicable product category rules, which are updated every 3-5 years.

### **3. Focus on large buildings.**

Producing and tracking environmental product declarations has a financial impact on manufacturers and contractors, respectively. Focusing on large buildings mitigates impacts on smaller manufacturers and contractors while reaping most of the environmental gains.

NBI's proposals apply to all buildings regardless of size (or cost), which creates a burden on smaller manufacturers and contractors less able to comply.

### **4. Phase in by building size.**

Another strategy for reducing impacts on smaller manufacturers and contractors is to phase in requirements by building size. Starting with larger projects allows learning to flow throughout the industry starting with those with the most resources and allows more time for smaller manufacturers and contractors to develop the capacity to comply with regulations.

Another option would be to begin with a period of disclosure-only before implementing global warming threshold limits, which has the added benefit of providing insight into local market conditions and regional variation within Washington prior to setting standards.

Regardless of phase in strategy, the environmental product declaration submittal requirement should start with a voluntary reporting period that is long enough to allow

manufacturers that do not already have supply-chain specific environmental production declarations to collect sufficient data and have environmental production declarations reviewed and published.

**5. Specify who is responsible for reporting and where that data lives.**

NBI's proposals do not specify who is responsible for collectively environmental product declarations or verifying compliance. Clear reporting guidelines are a prerequisite for successful implementation.

The proposals are also not clear on where that data will be stored. We strongly suggest centralized reporting that is publicly accessible. Environmental product declarations are a valuable source of information that can inform future, complementary whole building approaches to embodied carbon and provide insight into supply chain challenges and local market conditions that impact the availability of low-carbon building materials. This enables calibrated stretch goals based on real-world projects that are location and structural-type specific.

The Washington Department of Commerce and Carbon Leadership Forum are currently constructing a database, funded by the 2021-2023 Capital Budget, to track environmental declarations and labor impacts for structural materials used on large public building projects. The database will be complete in Fall 2022 and provides an excellent model for centralized reporting.

We strongly encourage NBI to work with stakeholders to address these concerns and recommendations, particularly stakeholders actively engaged in the legislative dialogue on embodied carbon, labor unions, environmental advocates, materials suppliers, structural engineers, contractors, and other members of the building and design community.

Sincerely,

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