LEED 2012v2, Forests & Wood: The Good, the Bad and the Downright Ugly

When it comes to maintaining high standards for wood and forests, the second iteration of LEED 2012 presents a confusing picture. But overall, it must be said that this draft lowers the bar on wood and forests in fundamentally unacceptable ways. If this were implemented, it would undermine the movement toward forest conservation and more sustainable forestry and result in major damage to USGBC's reputation.

Fortunately, as it relates to wood alone, this version of LEED 2012 is rife with errors and inconsistencies. Assuming that this pattern of rather sloppy work runs throughout, there will certainly need to be a third iteration and comment period before LEED 2012 is balloted. This means that there is still time to get this right, provided (and this, of course, is a big proviso!) that those making the calls in the LEED revision process are disposed to listen to reason.

The Good

Let's recognize upfront that there are positive elements of the current draft as it relates to wood and high-bar forest certification. In LEED BD&C, ID&C and sections of O&M, the LEED 2009 Certified Wood Credit has been supplanted by a new MR credit that rewards "Responsible Sourcing of Raw Materials," and FSC is the only reference standard for bio-based materials in this new credit. The credit also attempts to encourage the development and application of high environmental and social standards to mined and quarried materials in addition to wood, a move that is to be strongly applauded and supported. It is high time that materials in addition to wood were held to high standards in LEED.

It's also good that FSC remains a prerequisite for tropical wood in LEED for Homes, although one wonders why only tropical forests are worthy of such treatment.

Last but certainly not least, it's good that SFI and other low-bar forest certification schemes are nowhere in evidence in this draft. It would be even better if they would go back and scrub them from Pilot Credit 43.

The Bad

It would be nice if there were more to say about "the good" in relation to wood and forests in LEED 2012v2, but the plain fact is that the good is greatly outweighed by "the bad" and "the downright ugly."

Where to start? In LEED BD&C, which will govern a total of 8 rating systems, new Credits for "Environmentally Preferable Structure and Enclosure" and "Non-Structural Materials Transparency" offer numerous points for Life Cycle Assessment (LCA)-based tools and approaches, and particularly for "Third-Party Certified Type III Environmental Product Declarations" or EPDs. The big problem here is that standard LCA models and EPDs are narrow in scope, failing to account for site-specific ecological impacts, to say nothing of social issues. Under these models and disclosures, all wood looks good compared to, say, all steel and concrete. This in itself may approximate reality at some level, but a more fundamental problem is that under most LCA models, *all wood looks the same regardless of how it was harvested*. This is not only because of the scope problem referenced above, but also because standard LCA and EPDs rely on Life Cycle Inventory data that is highly aggregated, thus blurring important distinctions and trade offs that occur at the site level, including the differential impacts of different harvesting regimes. Under the LCA models and EPDs currently recognized by LEED, wood from intensive clearcuts will look exactly the same as wood from careful, selective logging – and all wood will fare well relative to most other building materials. In short, this is a huge gift to the *status quo* timber industry.

It is important that LEED support the application and uptake of LCA and EPDs. However, if the latter are not to become vehicles for massive greenwashing, it is equally important the USGBC commit itself to favoring the best and most comprehensive LCA and LCIA methodologies available, and to driving continuous improvement in LCA and EPDs so that they actually deliver the transparency that they promise. As things stand today, LCA and EPDs may obscure as much important information as they reveal. So-called "Life Cycle Assessment" might better be called "Half-Cycle Assessment" given all the important impacts for which it fails to account. When it comes to wood, LCA and EPDs are no substitute for high-bar forest certification, which addresses the important environmental and social issues that most LCA models neglect.

Given how well *status quo* wood fares under the LCA-centric credits in LEED 2012v2, it is plain outrageous that USGBC goes a step further and provides additional credit recognition throughout all the LEED versions with MR sections to legal, bio-based materials. Under LEED BD&C and ID&C, new credits bearing the title "Environmentally Preferable Non-Structural Products and Materials – Prescriptive Attributes" now recognize "bio-based" as an environmental attribute on par with recycled content, materials reuse, extended producer responsibility, and locally-sourced materials. Never mind the fact that in this version such bio-based materials must be documented in the USDA's Biopreferred database, and the latter currently excludes most wood products (see below): dialog with USGBC insiders clearly indicates that USGBC's intent is to recognize wood that is legally harvested as bio-based, and that proponents of the "thinking" behind this credit language will try to remove any barriers to such recognition in the next iteration of LEED 2012.

It is hard to believe that USGBC considers the law an acceptable performance standard for wood and forests, not to mention other bio-based materials, but there it is in black and white. For years, we have been debating acceptable minimum standards for wood in LEED. Forest advocates and sustainable design professionals have argued that FSC should be the minimum threshold – the floor, not the ceiling – and that lesser standards such as SFI, CSA, PEFC and ATFS should not gain LEED recognition. So what does USGBC do? Throw out certification entirely. Legal compliance is now sufficient to deem wood and other bio-based materials "green."

Big timber will celebrate the fact that they can now drop the pretense, and avoid the expense, of certification even to low standards. After all, even SFI requires some measures above and beyond the law, such as logger training and compliance with state Best Management Practices (BMPs). Why even do that if it's enough just to meet state or provincial regulations to qualify for LEED recognition?

Oh, and let's not forget that products that possess more than one of the attributes listed in this credit enjoy a multiplier effect. So wood that is clearcut in your backyard, meeting the requirements for local sourcing, is twice as green! Denizens of the Pacific Northwest are already celebrating.

The "bad" list doesn't stop here. FSC has been largely eliminated from the MR sections of LEED for Homes and LEED O&M, where it was recognized before, and is supplanted by - you guessed it - legal bio-based materials. This is especially egregious in Homes, where wood framing is, of course, standard practice.

Since when did "legal" become "green?" Who needs LEED when we have building codes, anyway?

All told, if you add together the points available under the new LCA-centric credits and for bio-based, *barely legal wood can now earn up to 5 points* under LEED BD&C. This in contrast to the single point available for FSC-certified wood under the Responsible Sourcing of Raw Materials credit. Gee, I wonder

how many LEED project teams will stretch for that extra point when it's so easy – and less expensive – to go for the status quo.

The Downright Ugly

One might think that we have already covered this topic rather thoroughly, but there is more.

One of the ironies of the legal bio-based attribute alluded to above is that USGBC apparently inserted the requirement that products be listed in the USDA's Biopreferred database without realizing that only a handful of building materials are so listed in that database, and that most wood products do not qualify under the current rules of the program. Established by the 2002 Farm Bill, the USDA's Biopreferred Program is run by a staff of a half dozen out of the University of Iowa. The program is intended to promote "alternative" bio-based products by favoring their procurement by federal agencies, and recognizes many cleaning products, automotive products, etc. in addition to a relatively short list of building materials. "Mature market products" – defined as those that existed prior to 1972 – are barred from the program, so common wood products like lumber, plywood etc. do not currently qualify. Many of the wood products that are currently listed qualify because they use bio-based adhesives, not because the wood itself is bio-based.

When informed that the full weight of the LEED wood controversy was about to descend on their little program, the staff at the University of Iowa were understandably concerned. Fortunately for them, USGBC has indicated that this was all a mistake, and that they really meant to include legal wood as a bio-based material. So it looks like the Biopreferred Program dodged that bullet!

Another irony of the bio-based attribute as currently written is that is not acceptable to use animal-based products whose "harvesting [sic] does not kill, abuse, or cause harm to the animals," but it is acceptable to use products linked to the destruction of entire ecosystems, causing harm to myriad species, if there aren't laws preventing it.

Finally, it must be pointed out that the bio-based attribute does not meet the intent of the EPP Credit – it does not in fact "improve overall environmental, economic and social performance." There is a lot more to environmental and social improvement than a reduced carbon footprint relative to non-bio-based materials, which is the supposed rationale for this attribute. For one thing, the legal destruction of natural ecosystems including forests is a major source of greenhouse gas emissions and one of the major drivers of the climate crisis – a fact that appears to escape most carbon bean counters.

The ugly doesn't stop there. Under the Responsible Sourcing of Raw Materials credit, it isn't enough to use an FSC-certified product to earn a point. You also have to comply with new "raw material sourcing disclosure" requirements:

Manufacturers and their raw materials suppliers must annually report data to a publically available database maintained by a third party.

Data to be reported by the Manufacturer:

Governance
Environmental Energy, Water, Waste, Materials, Biodiversity, Air Quality
Labor Practices
Financial reporting
Product responsibility

Either that, or you can just use legal wood and call it good.

Finally and bizarrely, the Responsible Sourcing of Raw Materials credit only recognizes wood products that are "FSC Pure" – i.e. 100% of the wood in the product must come from FSC-certified forests or plantations. FSC Mix products that mix FSC-certified and non-certified (but Controlled) wood in their production are not recognized.

Apparently, USGBC does not know that the vast majority of FSC-certified products now available are FSC Mix and that a requirement for FSC Pure only (now known as "FSC 100%," BTW) has the practical effect of all but eliminating FSC from qualifying for this credit.

A more appropriate approach – and one for which I and others have argued extensively in the past – would be to encourage the use of FSC 100% products by weighting them more heavily: i.e. a product that is FSC Mix 50% should contribute a corresponding percentage of its value toward earning a point, products that are FSC Mix Credit should be weighted at 100% of their value, and FSC 100% products should contribute 150% of their value.

To date, however, such reasoned arguments appear to have largely fallen on deaf ears. In fact, one hesitates to make specific recommendations, as the pattern has been for USGBC to use them as a springboard to shoot off in unexpected directions that baffle those of us with expertise in the issues at hand.

(As far back as the fall of 2009, the Sierra Club and a half dozen other environmental groups submitted an extensive set of "Recommendations for Improvements in the Way that LEED Treats Wood and Other Bio-Based Materials")

But maybe – just maybe – if enough of us raise our voices and rally behind a common set of recommendations in the current comment period, they will listen to us this time around.

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Jason Grant
Sierra Club Forest Certification Team