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SYNTHEGRATIVE THINKING

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Market Transformation and LEED 2012

LEED 2012 is currently accepting public comments and as currently proposed is missing a significant opportunity to fulfill its mission of market transformation. The significant improvement path (LEED for Existing Buildings: Operations & Maintenance (EBOM) option 3) in the Minimum/Optimize Energy Performance has been removed from LEED 2012. This opinion piece will outline the case for this important option. This compliance path provides LEED with a rare opportunity to both transform the market and increase LEED's market penetration. Many times these goals are in conflict but not in this case. LEED has received much criticism regarding its claims of achieving energy efficiency and this path has the opportunity to clearly demonstrate that LEED walks the talk by directly rewarding demonstrated energy savings.

Market Transformation–Lowering Entry Barriers

The purpose of LEED is to transform the market; this is clear in the USGBC's and LEED's mission statements. If we want LEED to transform the energy efficiency of the building sector, all projects must have the opportunity to enter the system and use it. All new construction and major renovation projects, all Homes and Neighborhood Development projects have the chance to use LEED at conception. The same cannot be said about EBOM projects. The biggest barrier to entry in EBOM is the minimum energy performance. Every EBOM project starts by evaluating this barrier and if they are not "close" to the minimum, they abandon the whole system. I have heard many new construction projects claim they are implementing LEED on their projects even if they don't seek certification. I have never heard anyone say the same of EBOM (although I am sure it has happened). So when this barrier to entry cannot be overcome, the unmeasureable market effect that uncertified new construction/major renovation LEED projects have had does not occur with the same frequency with EBOM. One of the goals of LEED 2012 development has prioritized the minimizing of barriers to entry for all LEED systems. There is no bigger barrier to entry than this one, and this barrier effectively eliminates the use of the entire EBOM system by approximately 50% of the commercial buildings market (and the 50% with the greatest potential for energy savings).

Climate Change–Reducing Overall Energy Consumption

The greatest opportunity to have a meaningful and positive effect on the issue of climate change is to address the worst performing buildings and make them better. This is just common sense. It does not take a study to know that new construction projects will only represent a very small percentage of all buildings by 2030. The bottom 50% of existing buildings use considerably more energy than the top 50% of buildings, also common sense. As LEED is now structured, its actual and potential effect on climate change is minimal. LEED currently rewards new construction projects with potentially dubious energy "saving" projections (the quality of those projections rely extensively on the skills and experience of the energy modeler) and also rewards the top energy performers based on actual consumption. Projects in the top 50% have a shot at using EBOM by improving their energy performance and only projects that make it to the top 25% can use the system. However, the majority of EBOM projects are already "top performers" and under the current system could actually have increasing energy use over time and still get certified. Since new construction is a small part of the market and current EBOM projects are typically already "energy efficient", the effect of LEED on climate change over time is minimal. To have a positive effect on climate change, LEED needs to change the trend of energy consumption for all buildings, not just reward projects that are already top performers. Market transformation happens when the top performers continue to get better and the bottom performers improve significantly. The latter actually has the far greater potential for generating real energy savings and having a positive effect on climate change.

Leadership–More Than One Way

There are many ways to demonstrate leadership on the issues we hold dear. I would suggest that a project who reduces their energy use by 30% is demonstrating far more leadership than a project who may be an Energy Star 85 this year but whose energy use is slightly increasing over time. The former may not even be able to apply for LEED certification while the latter gets a plaque. So I would suggest that top performers and significant improvers are both demonstrating leadership. Recognizing top performers is the mission of Energy Star and there are significant differences between it and LEED. One strategy for market transformation is to reward top performers but this is only a strategy and not the fundamental mission of USGBC or LEED. If this strategy is in conflict with the mission (as I believe it is in this case), then the strategy should be carefully evaluated and augmented with additional strategies aimed at achieving the mission. As EBOM evolves through recertification, it is my hope that the trend of performance is what gets evaluated as opposed to the absolute values. While recognizing leaders is a key component of LEED's purpose, its primary mission is market transformation. If we want LEED to transform the existing buildings market, we cannot continue to ignore more than half the market that is most in need of transformation.

Measuring Energy Performance–Nothing is Perfect

I have worked in the field of energy efficiency for over 30 years and I can attest that there is no perfect energy metric or benchmark. Energy Star is not perfect. It does not account for all of the possible effects on energy performance even for the project types it covers. I am not saying it is a bad system, on the contrary, I use it all the time. However, it is not the only tool I use to evaluate energy performance. Quite often there are legitimate reasons for a project with a low Energy Star score that are not accounted for in the system. Comparing your project to other similar projects provides useful feedback and information. Comparing your own trend in energy use and cost over time provides useful feedback and information. If the trend is paramount, as I have proposed, then the significant improvement path offers far superior feedback and information than the current system.

Devaluing the Brand?

One LEED certified office project with an Energy Star score of 80 is down the block from another LEED certified office project with an Energy Star score of 45. The 80 was an 80 last year, while the 45 was a 15 last year. Which project is in alignment with LEED's mission? I say both. If LEED fails to truly transform the market by helping to drive energy efficiency and address climate change, its brand will suffer far more by having to explain why it rewards the status quo. The 80 is rewarded for its continued performance while the 45 is rewarded for its significant improvement. In recognition of the relative performance differences, the

significant improvement compliance path has been proposed to be worth half the points available under the Energy Star path. This is fair and balanced (apologies to Fox News). Recognizing a lower performer with significant improvement on an imperfect scale does not devalue the brand, it enhances it by demonstrating that LEED is addressing climate change through market transformation and recognizes that continuous improvement is what EBOM is all about. Over time, the new construction/major renovation versions of LEED and EBOM must be definitively linked and EBOM must transform to be about continuous improvement (not just a onetime event like new construction). Recertification is the means to get us there and enhance the brand by being true to the mission.

So for me, this is all about using LEED to recognize those who generate significant energy savings. Even a project that is and has been an Energy Star 90 for several years is not generating energy savings any more than a new construction project actually generates energy savings relative to its mythical code-compliant baseline model. Both cases are projections of, at best, "maybe" savings requiring what if scenarios to justify. If we want the building sector to address climate change, I'll take the real, quantified savings every time. In fact, it is the only thing that really counts enough to make a difference. EBOM already recognizes the legitimacy of baselining against historical data as a means to benchmark energy performance (Case 2, Option 2B). So if it is legitimate for one set of projects, it is legitimate for all or it is legitimate for none.

If LEED's mission is providing environmental and human health benefits through transforming the built environment, there is no greater opportunity to do so than to include this compliance path in LEED. I would encourage those who agree to provide USGBC with public comments on this issue to restore Option 3 to the Minimum/Optimize Energy Performance prerequisite/credit in LEED 2012. The third round of public comments closes on March 20th.

To test the market interest in this compliance path, USGBC has introduced this concept into the Pilot Credit Library as an alternative to the Minimize Energy Performance prerequisite. Some significant limitations have been placed on its application; however, it does provide an opportunity for projects that demonstrate significant energy improvement (20% or more) to use EBOM and test the concept now.

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