

Good news, bad news and the Living Building Challenge

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"Imagine a world that is ecologically sustainable, culturally rich, socially just and beautiful"

This is the vision of the Living Building Challenge founder Jason McLennan.

Folks familiar with the evolving environmental movement will no doubt agree that there is an overwhelming sum of bad news. The green building movement, including our heroes working with the WNCGBC, have worked tirelessly to make things much "less bad," an essential step on this path that gives us hope.

Still, there is some bad news. Twenty plus years of LEED Buildings and the unmistakable take away (as discerned by the folks at the Living Building Challenge) is, "It's not nearly enough." Carbon emissions continue to climb to dangerous levels and the entire world seems hell-bent on following the carbon intensive lead of the US.

On the flip side, 20 years of LEED Buildings have demonstrated that it is possible to effect positive change through the marketplace.

But the bad news is that in order to financially encourage change, the true cost to society of pollution, carbon emissions, loss of habitat, loss of topsoil, etc. needs to be given a dollar value rather than written off as "externalities." Until this happens we are "rearranging deck chairs on the Titanic."

Good news. Technology may soon advance enough to begin to mitigate the damage done by, well, technology. It's a stretch to imagine that the means that got us in trouble will get us out of trouble, but we don't have any other options. While we can slow the pace by doing our green building and local living best, it's hard to imagine the exploding population freely passing on the comforts of modern living. Even deep dark greenies need safe, comfortable shelter.

The continued good news is we have all the pieces of a sustainable

future at our disposal. We know what we have to do and we know how to do it. We also know from experience that if the leadership exists the rest is possible and even likely. The U.S. used to lead the world in innovation and we can (in fact, we must) be the world's leaders in clean energy, water conservation, sustainable materials harvesting, and social justice.

The Living Building Challenge (LBC) may or may not be the vehicle that takes us to this place. There is no doubt, however, that the vision presented is essential to a collective, viable culture.

So what exactly is The Living Building Challenge? Its mission is to encourage the creation of Living Buildings, Landscapes and Neighborhoods around the world while inspiring, educating and motivating a global audience about the need for fundamental and transformative change.

The Cascadia Region Green Building Council (CRGBC) – the Pacific Northwest chapter of the USGBC – defines a living building as a structure that "generates all of its own energy with renewable non-toxic resources, captures and treats all of its water, and operates efficiently and for maximum beauty."

The LBC is comprised of seven performance areas, or "Petals": Place, Water, Energy, Health and Happiness, Materials, Equity, and Beauty. Petals are subdivided into a total of 20 Imperatives, each of which focuses on a specific sphere of influence. For example, one Imperative under the Materials petal is that no materials containing chemicals from the Red List be used. Some of these chemicals are easy such as lead, asbestos, and formaldehyde. Some of them such as phthalates and polyvinyl chloride (PVC) are very challenging. They are in everything from light fixtures to plumbing fixtures. PVC is not dangerous for the occupants of the building, but the manufacture of it is very harmful for people and the environment.

There are also three Typologies:

Emily Coleman-Wolf photos



Buildings, Renovations, and Landscape and Infrastructure. Project teams must identify the typology that aligns with the project to determine which Imperatives apply. Each project must also identify its Living Transect, or intensity of development surrounding its site. There are six Living Transects, ranging from Natural Habitat Preserve to Urban Core.

In order to achieve full certification, all Imperatives assigned to the identified Typology must be met. And the project must be operational for 12 consecutive months. This will insure the certification is based on the actual performance of the building.

Did you get all that? Yeah, neither did we the first time.

Here's a simplified outline to help you understand.



1. Pick a project type: buildings, renovations, or landscape and infrastructure.

2. Identify the Living Transect or site density:

- L1. Natural Habitat Preserve (Greenfield sites)
- L2. Rural Agriculture Zone
- L3. Village or Campus Zone
- L4. General Urban Zone
- L5. Urban Center Zone
- L6. Urban Core Zone

3. Look at the chart to see which Imperatives must be met for each of the seven Petals: Place, Water, Energy, Health & Happiness, Materials, Equity and Beauty.

4. Meet all the required Imperatives
5. Complete the project and then wait a year to be sure the building performs up to the design.

It is not easy, but if each new project achieved even one of the LBC Petals, the effects would be astounding.

Think about it: buildings that produce as much energy as they use (Net-Zero Energy), that reuse all their water (Net-Zero Water), that feel good to be in with natural light and vegetation (Health & Happiness), and are built with non-toxic

materials (Materials).

A project can achieve Petal Recognition, or partial program certification, for achieving all of the requirements of at least three Petals when at least one of the following is included: Water, Energy, and/or Materials. A project can also achieve Net-Zero Energy Building certification.

Currently five projects have achieved Living Certification by meeting all Imperatives of the Living Building Challenge, 12 projects have achieved either Petal Recognition, Net-Zero Energy Building certification, or both.

Let's be honest: the Living Building Challenge is very, very hard to achieve. It's no coincidence that the title of the program includes the word "Challenge." It's helpful to remember that LEED was very hard when we first started and now it's standard practice.

We can do this. We must do this. Let's commit to "Evolve Faster."

For more information on the Living Building Challenge visit the website at www.living-future.org/lbc and be sure to like the Living Building Challenge Collaborative Asheville Facebook page.



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