TO LEED OR NOT TO LEED?

By Katherine Viveiros

In today's society, environmental consciousness is spreading well beyond homeowners who recycle, compost or conserve water. It has changed the way we live, think and adapt to the societies around us. It has changed the way we communicate, travel, eat and entertain. It has even changed the way we build — new buildings, new communities, new societies, new mindsets. Now more than ever, we are more in tune with being healthy, conserving energy, reducing fuel use and most of all, preserving our environment.

The environmental efforts in the building construction industry have primarily focused on energy conservation and sustainable design. How can we build or renovate new projects using minimal resources and expending less energy, while minimizing the costs to maintain? The United States Green Building Council (USGBC) developed a standard rating system to measure environmental efforts called LEED®. The LEED rating system assists in addressing this question by establishing a set of guidelines for building and renovating to conserve energy and implement sustainable designs. The rating system goes well beyond measuring conservation efforts completed on a project. LEED is a mindset and way of life, one which the rest of society is quickly adopting.

What is LEED?

The acronym LEED stands for Leadership in Energy and Environmental Design. It is a rating system created by the USGBC that is being used nationwide. The focus of LEED is divided into specific categories to track the efforts made towards environmental conservation and sustainability when constructing or renovating buildings or homes. The categories include: Sustainable Sites (SS), Water Efficiency (WE), Energy & Atmosphere (EA), Materials and Resources (MR), and Indoor Environmental Quality (EQ). A final category, Innovation and Design (ID), allows the unique opportunity to be creative and sustainable with your project, or exceed the requirements of the already established credits in the LEED rating system. Upon submitting a project to become LEED Certified, the USGBC will review the application based on these categories and the efforts implemented on the project. The tally of the points, using the LEED rating system and checklist, will establish the specific level achieved: Certified, Silver, Gold or Platinum. An important difference to note is that buildings become "certified" and people become "accredited" when referring to LEED credentials.

Why Pursue a LEED-Certified Project?

Owners can benefit from having LEED-certified projects for the following reasons:

» Reduced impact on the environment and the personal satisfaction that comes with helping to preserve the environment
» Economic benefits, such as:
  - Reduced operating costs
  - Reduced or neutralized upfront costs
  - Enhanced asset value and increased profits (increased labor productivity, quality and output)
» Other benefits, including:
  - Health and safety benefits
  - Local efforts (overlapping benefits to other organizations)
  - Possible procurement of available grants
  - Possible tax benefits (City, State and Federal)
  - Reduced liability
  - Public recognition for having a LEED-certified project
  - LEED-certified buildings connote environmental leadership and stewardship

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Are There Other Options for the Owner?

Yes. Just because the industry is heading in this direction does not necessarily mean this is the only way to build green. Owners can decide to implement sustainable design into their buildings and still reap the benefits of operational cost savings. The beauty of becoming a LEED-certified building is the recognition and increased possibility of receiving state grants, tax relief and other local benefits by having that certified green building stamp on your project. Owners will also, by default, inspire other Owners and builders to want to build green.

When considering your project and the impact it will have on the environment, there are a number of items to keep in mind that will reduce the negative impact on the environment. However, these considerations do not come without a cost. When analyzing the use of sustainable products, it is important to assess the environmental benefit, the cost of the benefit and the comparison of what it would cost with a standard non-sustainable product. Most likely, you will find that the sustainable products will require more upfront costs, but the lifecycle costs will be reduced over time. If an Owner is considering the use of sustainable products for a large project, it would certainly be worth doing a lifecycle analysis. A lifecycle analysis evaluates the environmental impact of a product throughout its life cycle: from the extraction, through processing, manufacture, installation, use, and ultimate disposal or recycling. This analysis ensures the performance of the whole building and takes into account the complete building life cycle.

Owners often ask, "Why should I use LEED?" when a better question to ask would be "Why shouldn't I use LEED?". We spend a lot of time justifying to

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the Owner to go green or go LEED, when we should discuss the benefits and lifecycle costs with the Owner, so they can understand and make an educated decision on whether or not they want to take the LEED leap or simply make specific green efforts towards their projects. Another option to support the sustainable efforts desired by Owners without having to use LEED, would be to establish a goal of becoming 95-100% Energy Star compliant, which would utilize Energy Star products and systems. The U.S. Government (Department of Energy) has an Energy Star challenge program that will help guide the efforts to reach your specific goal. This is a great program, however it is somewhat limited to the electronic components in a project, which does not necessarily consider the specific uses of land, water and materials like the LEED rating system does. But yet, it is another option for Owners to consider.

Steps to Consider

The following are a few steps for Owners to consider when making the decision to go green or go LEED:

STEP 1

The first thing the Owner should do is establish a clear set of goals. The Owner should identify what their environmental intent and goals are if in fact they want to go green. The goals should include the specific level of green achievement (i.e. Certified, Silver, Gold or Platinum). Most Owners are concerned about costs and therefore are hesitant to invest in having a green project, or they are unaware of the actual upfront costs in comparison to the cost savings they will enjoy over time. This step is the most important and is the starting point.

STEP 2

Communicate your green goals to your stakeholders and professionals who can help you obtain more answers about your project and your decision to go green. Involve a LEED-accredited professional or green-savvy architect to help guide you through this process.

STEP 3

Finalize your intent and goals and make them public. Owners are more likely to stick with a goal of becoming green when it is made public. The decision for the project to be green has to come from the top with complete buy-in. With that, everything else will fall into place.

STEP 4

Let your professionals do the rest! Hire an experienced architect who will make your green goals come to life and hire a contractor that will implement the design to also meet your goals. It is also important to monitor and track the progress of the project, especially when cost-saving ideas are suggested. Hire a consultant to manage this process to ensure your interests as the Owner are being met. This is one area not to overlook. It is crucial to ensure your upfront hard work is being implemented in the field and throughout the entire process.

The Owner's Final Decision

In summary, there are a number of considerations to think about prior to making your decision to build green. The most important step is to make an educated and informed decision about what your project goals will be. The project professionals can help you through this initial stage. In addition, as part of this decision making process, also consider conducting a lifecycle analysis, putting together a budget and schedule, and determining the asset value after completion. Whatever you ultimately decide, it is important to consider all aspects of the project, from start to finish, while also considering the impact it will have on the environment. Utilize professionals to help guide you through the processes and ensure your specific goals are being met. In the end, you won't regret your decision to build green, if you so choose, as you reap the economic, environmental and financial benefits you have made in your finished project.

About the Author

Katherine Viveiros is a Project Manager for PinnacleOne's northeast region. In this role, she utilizes state of the art technology to track and monitor project tasks, budgets and schedules, including an online project management software. Ms. Viveiros is currently a member of the Connecticut Green Building Council and has over 11 years of experience in the construction industry. She has worked on a wide variety of construction projects ranging from schools to casinos and airports, and has an in-depth knowledge of all field construction and construction management activities. Ms. Viveiros is also preparing for her LEED Accredited Professional credential.

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