



Do Sustainable Real Estate Practices Cost More?

By Michael C. Tobin and George Boyadjis



Whether renovating current space or building something new, there is a mythology about the cost of sustainable real estate practices that should be put to rest. The myth is that sustainable real estate practices are more expensive than traditional approaches to design and construction. Since this is causing more harm than good in the market, it's time to shed light on the truth.

So, to the first fallacy about sustainable real estate practices — are they more expensive?

A common answer is that “a sus-

tainably-built project costs an average of 10 percent more.”

But that answer can be incorrect. Sustainable real estate practices are not necessarily more expensive. In fact, there is no basis to state that constructing or renovating space using sustainable building practices costs an average of 10 percent more.

To prove this premise and debunk the 10-percent cost premium myth, one must ask what is the basis of comparison — i.e. sustainable design and construction practices are more expensive than what?

Generalizing about the cost of incorporating sustainable real estate practices can lead to misconceptions about the financial toll of “greening” real estate. The key is understanding what exactly is being compared.

There are three typical responses when asked to explain the cost basis of the 10-percent premium myth. These are outlined below, followed by the subsequent myth-busting reasoning.



Cost Basis Myth 1

Sustainable space is more expensive than typical space of similar size and function.

MYTH BUSTER: There is no common definition of a “typical” building or tenant space on which to base that comparison. There are also very few buildings that are “exactly” the same, given the many variables that go into developing a building — the date of construction, location of the building, ownership structure and many other factors affect the reasoning behind the design, construction, financing and pricing of building projects.

There are millions of buildings in the United States alone that have been constructed and operated over the course of centuries, and it is practically impossible to compare their original construction costs to what their costs would have been if sustainable practices had been used.

Yet, as difficult as it may be, studies have been conducted that have attempted to answer this question by neutralizing as many variables as possible. Multiple studies by firms that specialize in providing construction market intelligence attempt to properly define a “typical” set of buildings for comparison purposes.

A few of these studies have attempted to make an accurate and statistically relevant comparison for the cost of building sustainable space that’s certified by LEED (Leadership in Energy and Environment Design — the widely used global certification standard) versus noncertified building space. These studies, conducted in different markets over many years have consis-

tently found no statistical evidence to support the claim that LEED-certified projects cost more to build than noncertified similar buildings.



Cost Basis Myth 2

Sustainable buildings are more expensive than a code-compliant building of similar size and function.

MYTH BUSTER: Every building constructed must be code-compliant. Even if the comparison were to a building adhering to code minimum, it is safe to say that there are very few structures built to exact code minimums. This would be like trying to compare the cost to build a particular brand of automobile, say a Ford or a Honda, to the cost to build a minimally code-compliant automobile.

So the question is “how do you accurately make that comparison and, more importantly, why would you compare one alternative to something else that you would never actually build?”



Cost Basis Myth 3

The cost alone of coordination and documentation to LEED or other green certification programs pushes the price to a 10-percent premium.

MYTH BUSTER: This is an extreme exaggeration — and if corporate real estate service advisers do not challenge this, they are ill-advised. The reality is that the cost to certify a building to many of the sustainable building programs is quite minimal. There are three facets to this cost exaggeration, though, that need explanation — program fees, professional fees and prerequisite costs.

>> **Program fees** are the fees associated with registering and submitting a project to the agency that certifies

the space as “sustainable.” These are typically much less than 1 percent of project costs. For example, for a \$2-million total project cost renovation of a 30,000-square-foot office, the cost to register and submit the project to the LEED program equals \$3,150. That is 0.16 percent of the total project cost.

In a second example, for a 100,000-square-foot build-to-suit office building with a total project cost of \$20 million, the cost to register and submit the project to the LEED program equals \$5,400. That is 0.03 percent of the project cost.

>> **Professional fees** are the fees paid to a service provider to coordinate the submittal to the sustainability accrediting agency. These fees have a high degree of variance across the country and are based on the experience of the project team, the specific certification program, the complexity of the project, etc.

The fee range starts at zero and can go up from there. Typically, lower costs come from consultants that have significant experience with the certification process as they are not padding their fees for unknown risk.

For example, for a \$2-million renovation of a 30,000-square-foot office, the additional fee for the architect to coordinate the LEED certification submittal equals zero, as it is included in the architect’s competitively-quoted fee. That is zero percent of the project cost.

In a second example, for a \$20-million, 100,000-square-foot build-to-suit office building, the additional fee for the architect to coordinate the LEED certification submittal equals \$30,000. That’s 0.15 percent of the project cost.

>> **Prerequisite costs** include services that are required in order to meet the prerequisites of the certification program. These costs may or may not already be included in the base project costs (which is another way of saying that these costs may not be viewed as additional or incremental costs, as they may be a valued com-

ponent of the base design). Some of the more common prerequisite costs are for ancillary services such as energy modeling, building commissioning and the like.

These costs vary depending on the scope and complexity of the project. For example, for a \$2-million renovation of a 30,000-square-foot

>> Professional fees vary significantly depending on the sustainability program being pursued, consultant experience, competitive bidding, market conditions, building type, etc.

>> Prerequisite costs vary as some sustainability programs do not have any prerequisites.

considered additional project costs: program fees, professional fees and prerequisite costs.

Yet, as shown, the total of these costs do not justify an erroneous market perception of a 10-percent premium. The costs for these programs vary significantly and the aggregate incremental costs to pursue sustainability should be much less than the 10-percent myth.

In addition, there is another important consideration: the net cost of sustainable construction. So, besides the gross costs discussed above, there may also be benefits in the form of economic incentives that should be taken into account when discussing the overall net cost of sustainable real estate practices.

There are many economic incentives that can be associated with the upfront cost of constructing sustainable space. These include:

- >> Increased concessions from landlords;
- >> Expedited permit process, which can save weeks or months on a project schedule;
- >> Access to sustainability-related tax credits or grants; and
- >> Access to financing (or more attractive financing).

When these economic incentives are considered, the net cost of constructing a sustainable building or building-out sustainable space might actually be less than the net cost of constructing the alternative. The fact is one cannot generalize the cost of incorporating sustainable real estate practices; sustainable real estate practices do not necessarily cost more. The key is to understand what the baseline is for the comparison.

MIKE TOBIN, MBA, LEED AP, is national director for Sustainability Services and GEORGE BOYADJIS, MBA, CPA, is executive director at CresaPartners, the largest corporate real estate advisory firm in North America, which exclusively represents corporate users of space. Boyadjis is a member of the Twin Cities Chapter of FEI and vice chair and a member of FEI's Office of the Chair.

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office, the additional fee for a consultant to perform the required energy analysis and building commissioning equals \$10,000 and \$30,000 respectively (or \$40,000 total). That is 0.50 percent and 1.5 percent of the project cost respectively (or 2 percent of the total project cost combined).

For the \$20-million total project costs for the 100,000-square-foot build-to-suit office building, the additional fee for the consultant to perform the required energy analysis and building commissioning equals \$20,000 and \$60,000 respectively. That is 0.10 percent and 0.30 percent of the project cost respectively (or 0.40 percent of total project cost combined).

Adding all of the "coordination and documentation" costs listed above for the two examples equals the following percentage of fees for achieving a certified sustainable project:

Example #1: Up to 2.16 percent of project costs.

Example #2: Up to 0.58 percent of project costs.

Now, before using these examples to discuss the new "typical" cost of pursuing sustainability program certification, note the following errors in logic that make the analysis suspect (there may be more):

>> There are many different sustainable certification programs available, with varied certification fees.

>> Prerequisite costs may not actually qualify as "additional" costs. This is especially true today as many building owners consider energy modeling and/or building commissioning as examples of best demonstrated practices, and therefore part of what should be included in the base-case scenario.

Understanding the 'Real' Costs of Sustainable Construction

The key to understanding if sustainable construction costs more is to first understand the baseline for the comparison. As illustrated above, it is difficult to compare sustainable construction to other "typical" construction, but studies that have attempted to do so have found there is no appreciable cost difference.

Also, the examples illustrated that using a minimally code-compliant building as the baseline draws an irrelevant conclusion.

Owners or tenants in a sustainable building may or may not choose to apply for certification under one of the many certification programs available in the market today (such as LEED, Green Globes or others). However, if an owner or tenant pursues certification under one of the sustainable building programs, there are some costs associated with that process that can be con-