

GETTING THE GREEN LIGHT

Businesses in Texas continue to see sustainable building as a worthy investment

John Nelson

In commercial real estate, cost is king. It determines whether new construction or even a retrofit project is viable. Developers are acutely aware of upfront costs inherent with every project. Site selection, preconstruction, equipment, labor, materials and technology all come under the microscope when counting the cost of construction. The aggregate cost must be below a certain amount to get the green light to move a project forward.

More and more, sustainable features are built into the equation for developments. Building sustainably has come a long way in its acceptance as an avenue for new construction and redevelopments. It has evolved past a trend or an environmental obligation to making good business sense.

By 2020, commercial buildings worldwide will account for 80 percent of all green building space, predicts the Business Benefits of Green Building report by McGraw Hill Construction Co. and CBRE.

“We think the majority of future construction will be green,” says Michele Russo, director of green content and research communications for McGraw Hill Construction Co. “In 2010, it was less than a third of new construction, and we’re estimating it will be 38 percent of the market share for 2011.”



The Irving Convention Center at Las Colinas is a 275,000-square-foot property with several sustainable features. See sidebar below for more information about the center.

The question of whether sustainable building is a trend has been emphatically answered with a growth of green construction and renovations across all asset classes the past several years. Texas is no different than the rest of the country in this regard.

In fact, Texas developed its own sustainable certification system — Austin Energy Green Building — that has been in use for 20 years. The state also has several developments that have achieved U.S. Green Building Council’s (USGBC) staple LEED certification or the Department of Energy’s Energy Star certification, some of which are highlighted in the sidebars. These third-party programs have had a lasting impact on sustainable building.

In addition, the Lone Star State is home to the LEED prototypical stores for Office Depot (LEED Gold) and Wells Fargo (LEED Silver), both of which are in Austin. The prototypes are used as models for all future ground-up stores.

Texas Real Estate Business magazine spoke with industry professionals about the trials and trends of green construction. Most sources spoke in terms of cost versus return. When it comes down to it, achieving that delicate balance could be the difference between success and failure.

COST

It is nearly impossible to overstate the rise in demand for sustainable properties in the Texas market. Government at the local, state and national levels has spurred a lot of the growth. A good amount of green properties are civic structures, including the City of Houston's Park and Recreation Department campus, Dallas' South Central Police Station, Austin's City Hall and Jim G. Martin Elementary School in San Antonio.

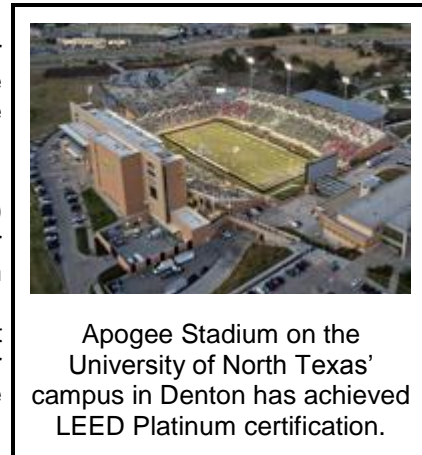
"Green is rapidly becoming the norm, and the consumer is expecting many of these features in design," says Rance Clouse, president of MadNic Construction, LLC. "New construction leans toward green, but often the implementation is viewed as a cost factor, making green a luxury."

To construct sustainable buildings, developers have to be willing to shell out money. It's the nature of the beast.

"Everyone wants to be green," says Bryan Morales, LEED AP, of Michael G. Imber, Architects in San Antonio. "However, companies are only interested if it's not a big obstacle."

One obstacle with achieving LEED certification or some other benchmark is the cost of materials. The prices for some have come down a bit over the past few years but sustainable materials still costs more. A good example of this is lumber.

Wood carrying the Forest Stewardship Council (FSC) certification has great qualities. It ensures that the lumber was harvested responsibly and that the wood is verified from the forest of origin all the way through the supply chain. These qualities are important to combat deforestation, but it can cost the developer a 10 to 15 percent premium. Other sustainable materials are similar in that it costs more than the run-of-the-mill products.



An important cost factor for everyone involved in new construction is time. It takes an average of 16 to 18 months from start to finish for a building to achieve LEED certification. This process can include achieving the core and shell certification before the beginning of construction, 6 months for the design phase with LEED features, submission of project to Green Building Certification Institute, 3 months for permitting, 12 months for construction and 1 to 3 months to complete the process.

The processes for sustainability can also be a stumbling block. Prefabrication and green building information modeling (BIM) have great benefits, but the software packages for the more sophisticated capabilities can get pricy.

"Many developers are in it to build a property and sell it as quickly as possible," says Jane Baxter Lynn, executive director of the USGBC's Central Texas chapter. "They can't necessarily show a value in such a short amount of time."

Unfortunately, many developers forego getting certified because the cost outweighs the return, in the short term at least.

RETURN

“If a project is going to get LEED Gold, you’re going to have some cost to that,” says Scott Dale, senior executive vice president at SIKON Construction. “But it’s not a deal-killer in most cases.”

Whether the motivation is for a better environment, a bigger return or a marriage of the two, owners have seen the value in building sustainably.

Consumers and businesses have shown the willingness to pay a little extra for going green. This puts cash-strapped developers in a pickle because the upfront costs take a heavy toll, but there are plenty of opportunities to make it up on the backend.

“If you’re in it for the medium- to long-term, there is a generous return,” says Lynn.

The most apparent return owners expect to see is lower energy bills. By using low-flow water fixtures, higher efficiency HVAC systems, automated controls and higher efficiency lighting, businesses are going to make up the difference in what was paid with what was saved. The Office Depot prototype store in Austin lowered its electricity costs by 16 percent and its carbon intensity by 23 percent when compared to Office Depot stores of similar size without LEED certification.

This isn’t anything new, these capabilities have been around for years. Now competitive pricing has made it more affordable.

The use of net-zero trailers has also helped ease energy usage for developers. Construction sites usually have several trailers that can sometimes burn more energy than homes, which is costing the developer money and is harmful to the environment. EcoPort Mobile has developed trailers that use significantly less energy than average jobsite trailers.

Additionally, the government has spurred demand by offering incentives for developers using sustainable elements. Other incentives include the emergence of renewable energy credits (RECs). RECs can be purchased to support renewable energy companies without having to switch energy providers. An individual REC can be purchased in exchange for 1 megawatt-hour of energy from an alternative source, and the REC can also be traded, sold or bartered.

The processes of going green have also helped save developers from spending too much. Third-party programs have helped buildings get leaner by decreasing wasted building materials. Using fewer materials has expedited cleanup time and has helped minimize overuse.

The integrated project delivery (IPD) system between architects, developers and owners has also helped the businesses share the benefits as well as the challenges. The third-party process has helped bring these companies to the table together to get the project as lean as possible.

“Using business information modeling as the tool and LEAN as the process, green is the result, which allows the schedules to go faster, less materials to be used and limits the handling time,” says Sam Latona, manager of pre-construction at Turner Construction in Texas. “On the pre-construction side, the focus is on first cost versus total cost.”

That last leg in total cost for developers is the actual sale of the property. One of the results of the emergence and popularity of LEED is that it is a great marketing tool for developers.

“Developers will own their property and flip it,” says Latona. “They can get more money if they have a sales pitch.”

Owners equate the LEED label with less expensive energy bills, less waste, higher-quality materials/operations, less liability, higher transparency and minimal maintenance. Additionally, properties with green features tend to have higher occupancy rates than those without sustainable features. For owners, this means more occupants paying higher rents.

Sustainable buildings have become the source of competition among owners, so it’s in the best interest of developers to incorporate as many sustainable features as possible to maximize the price tag on developments or redevelopments. Property management firms such as Cushman & Wakefield, Jones Lang LaSalle, CBRE and Transwestern have also helped build their portfolios to include green properties, which has also helped spur more sustainable building.

OUTLOOK

Since developers and owners have invested in sustainable features, whether the motivations are fiscal or environmental, it’s safe to say that green building is going to be around for the long haul. According to the Business Case for Energy Efficient Retrofit and Renovation report by McGraw Hill, 91 percent of businesses have made energy efficiency upgrades in the past 2 years. Many properties in Texas already have a LEED label, and several of the ones under construction are designed to achieve it.

Developers are looking now more at the operations side of the equation, as opposed to the materials side. Owners are trying to tighten their energy usage by monitoring the buildings’ operations to get them to peak performance. One trend has been the evolution of smart systems. The automated system can limit energy use by letting some of the operations hibernate while not being used. The trend is expected to continue into the new year.

“The USGBC has definitely evolved,” explains Lynn. “It’s not just about bricks and mortar. It’s about operations as well.”

Owners and developers also expect for building materials and technology to improve over time. As more materials and technology companies emerge, the competition has helped improve the quality of goods produced.

For the long term, developers are expecting alternative energy sources to be utilized practically, especially as solar energy and wind turbines become more available. Some of the predictions for Texas properties to use in the coming years are leasing roof space for solar use, carbon trading and wind turbine inclusion.

The new commercial green building market will account for 40 percent to 48 percent of the market share for commercial properties in 2015, according the McGraw Hill report. Texas developers are expecting the lull in new construction to subside in the next few years, which will only increase the number of sustainable properties in the market.

Government Incentives

Government bodies in Texas are spurring growth in the sustainable building market by offering incentives to developers. The public sector has been a vital catalyst for the sustainable movement in commercial real estate.

“The demand for green building is driven by the government,” says Michelle Russo, director of

green content and research communications at McGraw Hill Construction Co.

These incentives from Texas governmental bodies include:

Dallas: The City of Dallas has offered expedited permitting for commercial construction projects more than 50,000 square feet that are attempting to achieve LEED certification.

El Paso: The City of El Paso is awarding grants at increasing intervals determined by the level of LEED certification. Maximum grant allowance is \$200,000 for LEED Platinum for new construction. The maximum grant allowance for multistory, mixed-use that have been 50 percent vacant for 5 years is \$400,000.

Harris County: The Harris County Commissioners Court adopted an ordinance for a tax abatement that will cover costs incurred by developers to certify commercial properties with USGBC. Properties that meet the specified level are eligible for tax abatements of 1 percent of the cost of construction. Properties with higher ratings will get higher discounts. Buildings that meet platinum level eligible for tax abatements of 10 percent of construction costs.

San Antonio: The San Antonio City Council adopted an ordinance that will approve the second phase of the city's incentive scorecard system. It also authorizes administrative waivers or reduction of development fees for projects reaching specified scores from the scorecard. Points are awarded to projects achieving LEED for new construction consideration.

Source: U.S. Green Building Council

Irving Convention Center at Las Colinas

Location: 500 W. Las Colinas Blvd. in Irving

Size: Approx. 275,000 square feet (photo on cover)

Sustainable features:

- Unfinished copper exterior
- Vertical design
- Minimal water usage
- Use of drought-resistant plants and a panoply of trees on exterior

Apogee Stadium

Location: University of North Texas campus in Denton

Size: 31,000 seats; Approx. 180,000 square feet

Sustainable features:

- Three wind turbines (not yet complete) will provide approximately 500,000 kilowatt hours per

year, eliminating 323 metric tons of carbon dioxide.

- Fifty percent of stadium site is preserved/restored with landscaping suitable to north Texas.
- Reduced stormwater runoff.
- 25 percent reduced energy use.
- 52 percent reduced water use.
- 20 percent of materials recycled; 47 percent local
- Fly ash substituted for some of cement to construct concrete portions.
- Low volatile organic compound emitting materials such as adhesives, sealants, paints and flooring.
- Increased natural daylight and outdoor views.

<http://www.texasrebusiness.com/articles/DEC11/cover2.html>