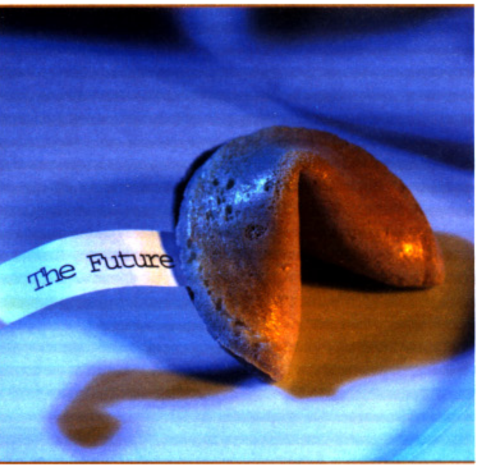
THE 2005

Outlook for Green-building Markets

By Jerry Yudelson, P.E.

THE GREEN-BUILDING MARKET IS DEVELOPING RAPIDLY. For example, three years ago at Interface Engineering Inc., Portland, Ore., it was rare for me to see a Request for Qualifications from a government agency for a building project that specifically asked for green-building qualifications or LEED™ project experience. By late 2004 in the Northwest and California, I saw this not only requested on just about every project submittal, but significant points (10 percent or more) often awarded for it in the evaluation scheme.



In addition, I'm beginning to see more and more developers ask about LEED for their projects. In my area, a very conservative, family-run development and property management firm came to me to see how they could retool their vacant office building as a green building using the LEED-CI scoring system. They wanted to prepare a leasing proposal for a very progressive corporation with strong green-building interests. I was struck by how much the developer "got it," as the discussion quickly turned to how they could re-invigorate all their properties using the LEED-CI and LEED-EB systems and also get a marketing advantage.

The building industry is notoriously conservative, and most change happens slowly, yet the number of LEED-registered projects has shown exponential growth from a couple of dozen at the end of 2000 to more than 1,700 at the end of 2004, based on U.S. Green Building Council (USGBC) project data. In addition, in just three years, more than 150 projects were LEED-certified at the end of 2004.

The interest in green buildings is reflected not just in the official LEED registrations but in the many projects I see with explicit green-building goals that do not intend to register with the LEED system. My colleagues and I estimate these projects equal two to three times the number of formally registered LEED projects. My own estimates are that green buildings had penetrated 5 percent of private-sector projects and perhaps 15 percent or more of public-sector projects as of 2004.

Given the rapid growth of interest in green buildings and sustainable design by the commercial building industry (and increasingly the residential building industry), I believe design and construction firms need to aggressively respond to stay competitive in 2005 and the next few years. The undeniable growth of USGBC's LEED program is an indicator that these firms also must revamp their marketing efforts to keep up with industry leaders.

LEED CONSTRUCTION IN 2004

The market for green buildings accelerated in 2004 with total LEED-registered projects surpassing 1,700 and total LEED-certified projects exceeding 150. New LEED project registrations exceeded 650, a growth of nearly 50 percent from 2003's total new-project registrations. The figure shows the growth of LEED-registered projects, LEED-certified projects and LEED-registered projects' area since the introduction of LEED 2.0 in 2000.

At an average of about $11 million in construction costs per project, or 110,000 square feet at $100 per square foot, new LEED registrations accounted for about $7.15 billion, or 2.7

"THE TERMINATOR," CALIFORNIA GOVERNOR ARNOLD SCHWARZENEGGER, ISSUED AN EXECUTIVE ORDER IN DECEMBER 2004 MANDATING ALL STATE AGENCIES TO ACHIEVE LEED SILVER CERTIFICATIONS FOR NEW BUILDING PROJECTS AND RENOVATIONS. SO IN TERMS OF AGENCY RESISTANCE TO GREEN BUILDINGS, IT'S "HASTA LA VISTA, BABY!"

percent of the total U.S. nonresidential building construction market of $264 billion.

If one assumes the total market for LEED-registered projects is 25 percent of the total building market, then one can say LEED projects achieved 10 percent market penetration for the first time. However, hidden in this overall statistic is the fact that the market for LEED buildings in the private sector still is relatively undeveloped because only about 25 percent of LEED-registered projects are in the corporate building market segment.

Owing to policy decisions to "go green" and the attitudes of long-term building owner-operators, the government and nonprofit sectors represent nearly 70 percent of the total green-building market at this time. In fact, I have seen some erosion in the corporate share of the LEED building market during the past two years. My analysis of the growth of the number of LEED-registered projects from mid-2003 to mid-2004 shows the fastest-growing market segments were nonprofits followed by federal and state governments. The growth of for-profit project registrations and project area in 2004 was 57 percent above 2003, compared with 69 percent overall growth in registrations and 58 percent growth in project area for nonprofits and government buildings, indicating the corporate segment was not keeping up with the growth of the public sector and nonprofit LEED project numbers but was holding its own in terms of project area.

MARKET GROWTH WILL CONTINUE

What do these data mean for owners of design and construction firms?

First, recognize the market for green buildings is much larger than the market for LEED projects alone. In my experience, it is perhaps three- to four-times larger. Many owners, public and private, are saying, in effect, "I want a green building, but I don't want to pay for LEED," so there is latent demand for this approach in perhaps as much as 30 percent of the total commercial-building sector.

Second, the growth in the green-building market shows no signs of abating. To form my projections, I used statistical marketing experience and research across many industries, including such disparate areas as personal computers and agricultural innovations, to name a few. This is called "the diffusion of innovations" theory. This convinced me that we still are in the very rapid growth region of the "innovation adoption" curve. So I predict that by 2010 there will be:

- 3,000 annual LEED registrations (a $30 billion project market)
- 13,000 cumulative LEED registrations
- More than 2,500 LEED-certified projects
- Growth rates remaining at or above 30 percent per year for LEED project registrations
- More than 30,000 LEED-accredited professionals (there currently are less than 20,000)

Third, I have seen the incremental costs for LEED projects decreasing as project teams get more experienced in delivering green buildings at affordable prices. In my firm, for example, we have decided each project must exceed local energy codes by at least 30 percent, and we bring a cost-effective approach to achieving that goal to our engineering design work. When building owners and developers see increasing evidence that high-performance buildings are being delivered on conventional building budgets, they will start demanding similar performance from their own design and construction teams.

Fourth, for the preceding reasons, the market opportunities are growing but the competitive environment is growing, as well. The role of marketing is to ensure a firm does not lose market share to more innovative competitors, and the firm builds the internal capability to respond rapidly to industry changes, including increasing client requirements for green features; an integrated design process; and successful, demonstrated green-building experience.

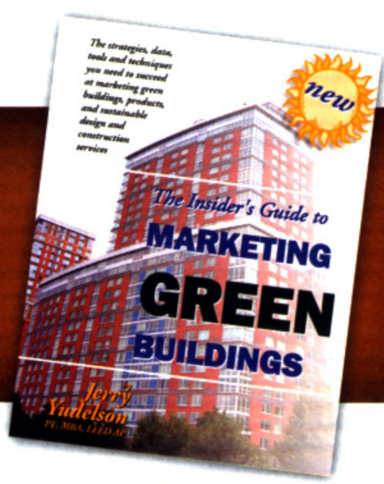
BARRIERS TO MARKET GROWTH

Given these projections, what could possibly derail the green growth engine?

The primary determinant of growth increasingly will be the extra upfront cost for green projects, even if this incremental cost is offset by clearly demonstrated benefits, such as utility-cost savings, gains in productivity and health of employees, and marketing or public-relations benefits. Such cost issues can be offset by government policy declarations; I am seeing this at the municipal level as each jurisdiction strives to outdo the others. For example, Boston is outdoing Chicago, which topped Seattle in 2004, and so on.

Even "The Terminator," California Gov. Arnold Schwarzenegger, issued an executive order in December 2004 mandating all state agencies to achieve LEED Silver certifications for new building projects and renovations. So in terms of agency resistance to green buildings, it's "Hasta la vista, baby!"

JERRY YUDELSON *is the author of* Insider's Guide to Marketing Green Buildings, *a 200-page book offering advice to keep up with competition in the green-building industry. More information about the book can be found at www.yudelson.net.*



And, of course, at the corporate level, there is growing pressure on many large businesses to do something to respond to sustainability imperatives of their customer and employee bases. Green buildings become easy tools to use in responding.

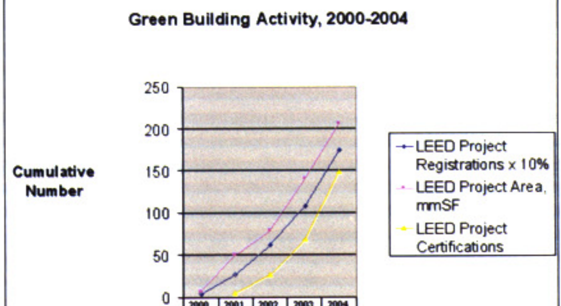
MARKETING RESPONSES

I am quite impressed by the 2004 commitment of large contractors, such as Turner Construction Co., New York; DPR Construction Inc., Redwood City, Calif.; and Swinerton Builders, San Francisco, to make green building a major business and professional corporate priority. This sends a message to other competitors that these firms see the green-building market segment as a major growth opportunity. Firms that target public-sector markets need to make such emphatic responses to keep up with competitors.

Many architecture and engineering firms also have responded in kind, primarily by getting more than half their professional staffs to become LEED-accredited professionals. An example is Busby Perkins + Will Architects Co., Vancouver, British Columbia, Canada, one of the 10 largest North American architectural firms. More than half the firm's staff is LEED accredited, which also makes it an example of an architectural firm that has been branded green. Another leader in this regard has been Keen Engineering, Vancouver, which has more than 60 percent of its professional staff LEED accredited. Many smaller firms have responded by having all principals take and pass the LEED exam. For many, it is their first formal test-taking in decades!

We will begin to see the rise of more branded-green building firms as this internal expertise increasingly results in more finished and certified green-building projects.

All in all, I can forecast the prospect for major growth, significant marketing prospects and great business opportunities for firms nimble and smart enough to jump aboard this moving train.



	2000	2001	2002	2003	2004
LEED Project Registrations x 10%	4.5	27.5	62.5	108.1	175.3
LEED Project Area, mmSF	8	51	80	141	206
LEED Project Certifications		5	26	68	148

Growth in LEED green building activity

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