

LANDWRIT

Unveiling the Green Homebuyer

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Housing is the critical missing link in the green building movement. To change this requires builders to appeal to health-oriented buyers in addition to energy savers and environmentalists.

The costs of development are represented by the curved lines and the “benefit” is represented by the ascending straight line. The cost of standard construction is lower initially, increases throughout development, and then slowly decreases during occupancy, when standard construction is more expensive to operate than green construction. The reverse is true for green building: the cost is higher in predevelopment, declines throughout development, and is lower during occupancy than standard development. Benefits are the same regardless, and ideally it is the area between cost and benefit that is the economic benefit of the venture.

ALTHOUGH THE GREEN BUILDING movement has made significant strides in recent years, real estate’s biggest player, residential development, has yet to make a notable showing. The housing sector occupies 50 percent of the U.S. real estate pie, but it produces less than 2 percent of all green building. This represents only a tiny fraction of the 1.5 million new homes built each year. If green building is to have any kind of an environmental impact, a way must be found to engage the residential market *en masse*.

There are, however, a number of specific reasons why the green movement has not gained more traction in residential development. Homebuilders, in general, do not seem to grasp the motivations and demand from homebuyers who drive the green market. In all fairness, until now, there has been little reliable data to quantify and characterize the green consumer. In addition, costs and premiums associated with green residential

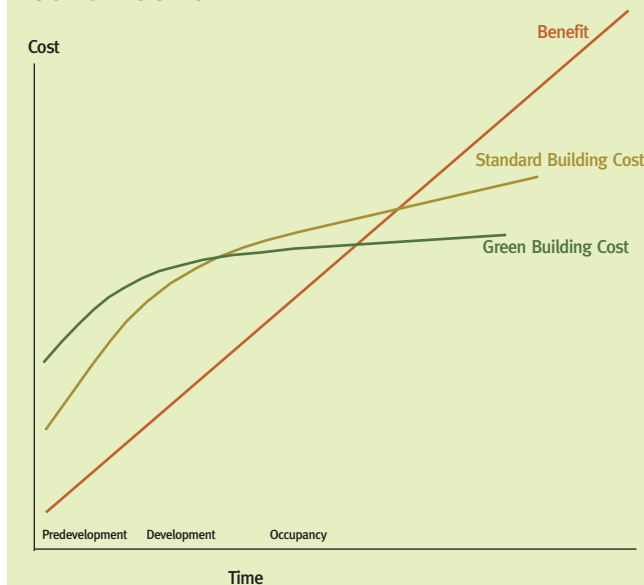
products have been widely misquoted and largely misunderstood. Getting the facts straight is the first step toward accelerating the residential green industry and helping residential developers make more informed decisions.

If homebuilders or residential community developers are given the economic motivation to go green, they probably will. The commercial market for green building has found traction in marketing to its counterparts in nonresidential development the benefits of reduced energy consumption and lowered utility bills, which drop directly to the bottom line of income-producing property owners. The occupants of these structures also receive benefits that are harder to quantify—such as improved productivity, healthier living, and a sense of environmental responsibility. So far, the residential market has had to struggle to use this same information to penetrate the market on a scale anywhere near that of the nonresidential sectors.

The following are some of the reasons why residential builders and developers have not kept pace with commercial segments of the industry:

Cost-Benefit Structure. The timing of green building costs and benefits, and their relationship to the design-build-occupancy cycle, help explain the rift between acceptance of green development in the residential versus the non-residential sectors. The best estimates suggest that the financial value

COST BENEFIT OF STANDARD VERSUS GREEN CONSTRUCTION



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of green benefits outweigh the construction cost differential alone (not including the R&D expenditure) only after seven years or so. Although land developers, builder developers, and homebuilders bear the additional costs of green development, only the homeowner occupant experiences the benefits.

Inertia and the Cost of Innovation. Going green requires rethinking everything, including land acquisition, land planning, architecture, product type, building materials, supplier relationships, waste management, and so forth. But the residential real estate segment is slow to adopt new ideas, learn new technologies, adapt to new markets, and respond to changing business climates. Put simply, developers and homebuilders survive and thrive by relying on easily replicable business processes that yield predictable cash flows and are costly to change. It is precisely these costs—the costs of business process change, of “turning the battleship”—that present the real challenge to the industry.

Brand Confusion. There is still confusion in the marketplace over what various green labels mean. Until the green development branding wars have ended, consumers may be inclined to wait on the sidelines and let the experts sort it out. Unfortunately, the industry is nowhere near rationalizing itself. The technology and best practices involved in green building change almost daily, and numerous organizations—the U.S. Green Building Council (USGBC), the Environmental Protection Agency (EPA), the National Association of Home Builders (NAHB), and many other regional/local groups—are vying for the coveted role of industry standard bearer.

Paying the Piper. Builders would invest in the R&D and start building green homes—if enough consumers would pay a sufficient premium to offset the initial investment in process change. Even though the cost differential is still

subject to debate, builders and developers who make the switch need to be compensated for their business process changes, which come at a price. What is not clear is how much of a premium homebuyers are willing to pay for green homes.

Even though Americans are more aware of the environment than they have ever been before, homebuilders report in a national consumer study by RCLCO (Robert Charles Lesser & Co.) that this awareness has not yet had an impact on the behavior of typical homebuyers. The most common response from builders is that most buyers do not want to trade granite countertops for solar panels. More than half of builders believe there is a lack of consumer awareness surrounding green building, and almost one-third of them feel that there is no consumer preference for green building vis-à-vis traditionally constructed products.

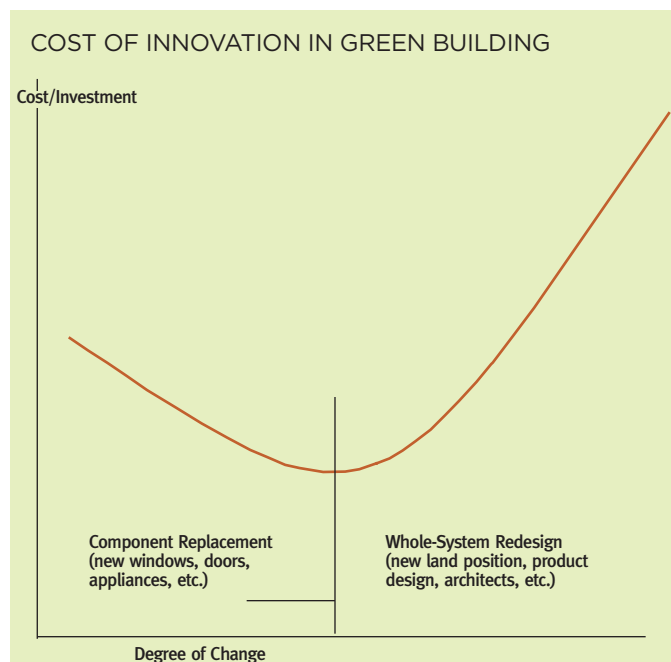
Most homeowners are unaware that buildings—including their own homes—make up two-fifths of the total U.S. energy use and atmospheric emissions, and approximately one-fifth of its water effluent problems. More than 70 percent of potential homebuyers believe that their homes either have no impact or an acceptable impact on

Marginal costs decrease as developers replace components—i.e., new windows, doors, etc.—but increase as they attempt whole-system redesign, such as new suppliers, land positions, architects, etc.

the environment. However, potential homebuyers overwhelmingly feel that developers are not paying enough attention to the environment. What is promising is that, of those who are aware that their homes have a negative impact on the environment, 80 percent believe that they have the power to do something to reduce their impact, either in their existing homes or in a future purchase. This suggests that as buyers become more aware of the connection between their homes and the environment, they feel more motivated to “do something” about the problem.

Most consumers have different ideas about exactly what constitutes the environment. For some, the environment comprises air, water, and flora/fauna, while for others, the term connotes a continuum of economic, social, and consumption patterns.

With so many definitions and attitudes, can green residential products be sold in the same way to all potential “green home-



In truth, the environment itself is a difficult sales proposition in the residential market. Without significant attitudinal adjustments, appealing to environmental sensibilities alone will probably not create a critical mass of demand for green homes.

buyers?” Sentiments about green are far too diverse to assume that there is one “green homebuyer” segment. Rather, there are at least three shades of green homebuyers, each with differing objectives, capacities, and potential to affect the industry.

Forest Greens. Forest Greens are homebuyers who want a green home because they believe that investing in the environment is the right thing to do. Although they recognize the energy and health benefits of a green home, their decision is driven by moral imperative more than anything else, and while they may not know everything there is to know about green building, they know they want it. These people tend to be well educated; more than twice as many potential homebuyers with graduate degrees are willing to spend money on health-related benefits without expecting to recover these expenses than those with only a college education. Only 6.1 percent of potential homebuyers consider the environment a motivating factor in their next home purchase, and only 17 percent of all homebuyers are willing to spend money to protect the environment for the environment’s sake alone.

Greenback Greens. The commercial market has achieved some success by touting green development’s energy savings and contribution to the bottom line. Many green homebuilders have attempted to follow suit by promising significant energy savings to potential homebuyers. This appeal to cost contain-

ment via energy savings and the ethos of “pay now, save later” is a powerful motivating factor for Greenback Greens. Greenback Greens tend to be older; retirees or buyers 65 and older are on average three times as likely to desire a home with energy-saving appliances and energy-efficient building methods than any other age group. They also may be price sensitive, as buyers with incomes less than \$150,000 are more likely to be interested in this type of home than buyers with incomes above \$150,000.

The marketability of the energy-saving aspect of green homes depends on whether such homes can penetrate the market beyond the Greenback Greens, who tend to be older and less wealthy, and who require smaller houses. Unfortunately, most people have difficulty understanding how much they will save by purchasing an energy-saving home, and data indicate that “energy savings” as a market factor has problems. When asked whether they would make an investment today on energy-saving features even if they might not be repaid in cost savings down the road, the favorable response rate from potential homebuyers dropped from 75 percent to 18 percent. This is a huge marketing barrier for builders and developers touting lower utility bills as one of the benefits of a green home.

When then do buyers need to feel these energy savings in their wallet in order to purchase a green home? Of those who indicate that they would spend money on energy-saving features if they could recoup this investment, 72 percent indicate they need to recoup it in less than five years, and the average threshold indicates 3.82 years. Meanwhile, only 18 percent of homebuyers are willing to spend money on energy savings if they cannot recoup these investments in cost savings. Estimates of the time needed to recoup the costs of energy-saving features range from six to eight years, and many homeowners change residences every three to seven years. These disconnects in payback periods provide some insight into the reasons why saving energy alone is problematic as a marketing feature for the green residential industry.

Healthy Greens. Many Americans are obsessed with health and wellness, one of the largest spending categories nationwide. These potential homebuyers with health on

their minds tend to carry this fixation with health over into their homebuying preferences. Response data on homebuyer health spending compared with environment and energy spending are interesting. When respondents were asked about the likelihood of their spending more money for perceived health or wellness benefits, more than 91 percent indicated they would do so. More important, 41 percent of all respondents indicated that they would do so—even if they never recouped this investment. These Healthy Green buyers represent perhaps the most interesting and potentially promising market for the green development industry, which already delivers a product with health benefits built in. But the industry has not yet effectively communicated this benefit to America’s health-obsessed homebuyers.

Healthy Green buyers tend to be well educated: 37 percent have college diplomas and 40 percent have graduate degrees. Moreover, they are wealthy. Approximately 37 percent have incomes over \$100,000, and more than 60 percent of those with incomes over \$250,000 indicated that they would pay more for the potential health benefits associated with green buildings even if they did not recoup the cost. The distribution across age groups is uniform, indicating that the appeal of “health” crosses generational boundaries.

In contrast to the Forest Greens and the Greenback Greens, both of which present some marketing challenges, the Healthy Green buyers—with their strong tendency to make investments in health and wellness—seem to be seeking ways in which to spend additional money on the body temple. If these buyers are already spending their money at Whole Foods, buying bottled water, using expensive air filters, and paying for expensive health club memberships and executive physicals, might this group represent those who may be convinced to buy green?

Data from the RCLCO survey indicate that more than 60 percent of builders believe that there is no consumer premium associated with green, while 80 percent of builders indicate that they would consider building green if they were convinced of a price premium for it. Meanwhile, some builders claim premiums of zero to 5 percent, while some industry-sponsored research has pegged this premium as high as 20 percent.

The willingness to pay a premium for a green home depends on the type of perceived benefit. Healthy Greens may represent a potential sweet spot of market opportunities since more of these buyers overall are willing to pay higher premiums than their counterparts.

This could mean the residential green market is sluggish because it is currently missing its mark. While much of the industry has been desperately trying to convince the buyer pool—and itself—of the economic environmental and energy savings benefits of a green home, the market most willing to accept the costs of a green home is more concerned about health and wellness. This is a deeper market that spans age groups, a wealthier market with higher incomes than any of the other shades of green, a better-educated market that is receptive to sophisticated and fact-based marketing, and a market that does not necessarily see the upfront investment as something that has to be recovered in cost savings.

Without some changes in definitions, attitudes, and business practices, the residential component of the green building industry may never reach “escape velocity.” Green building advocates should begin to work on the following goals:

Define Green Building. First, green building advocates have to settle on a commonly held set of principles that define green building and dispense with endless building science standards. Like “organic” and “fair trade,” the details may be fuzzy and the definitions may change. The crucial element is to sell the concept to the consumer now. Once the industry finally settles on a definition that potential homebuyers can understand and that has been standardized nationwide, it will have a much easier time bringing consumers to the closing table.

Educate the Consumer. Consumers will not buy something until they are convinced that they need it. Industry organizations can and should take the lead in educating consumers, bringing them to sales centers by convincing them that they “need” green to be happy. Among the vehicles that can bring this information to the American consumer are television advertisements, magazine ads, Web sites, and TV shows. Once industry groups have succeeded in convincing consumers that

they need green building, homebuilders can market to this need.

Green Building or Clean Building? Savvy homebuilders should seize the market opportunity presented by the Healthy Greens and court this health-seeking buyer, transforming their green homes into clean homes. Marketing should shift gears from touting the benefits of photovoltaics and tankless water heaters and start talking about carpets free of cancer-causing mutagens and water supplies free of toxins. Additional research will determine whether or not health and wellness prove to be better selling points than energy savings and the environment. Yet, existing data support the notion that health sells in ways that environmental sentiment and energy conservation do not.

Know Thy Customer. Consumer preferences and the market for green building are sorely misunderstood. The limited case studies that do exist suggest that demand for green homes may have very particular patterns and upside potential for the development entity in terms of price premiums. At this point, the most basic questions are still being asked. How many green homes can the market absorb each year? In what markets? And by which consumers? The follow-up questions are deeper and require additional research. Thoroughly understanding this market—where potential buyers are, how many there are, what they are willing to pay—will enable the industry to maximize its demand potential and perhaps create a critical mass of green residents from which to catalyze additional demand.

Share the Load. The costs associated with change in the business process are huge, but if they have to be borne by individual business entities, they are insurmountable. Industry groups need immediately to shift their focus to remedy this situation. USGBC, NAHB, EPA, and any others should step up to the plate and begin to move the industry by providing residential developers and homebuilders with new ideas, data, and information on market demand through education, grants, low-interest loans, joint ventures, technology-sharing programs, volume discount negotiation with suppliers, and so forth.

Use What You’ve Got. RCLCO’s interviews with builders nationwide indicate that most homebuilders believe regulation will force

Only when offered an energy-savings guarantee do potential buyers indicate that they would be more likely to purchase a home with energy-saving features.

them to go green before the market does. For all but a few builders, however, there may be little cause for concern, because unbeknownst to them, they are already building green. Builders nationwide already are using energy-saving devices in their standard operating procedures, many of which, when combined, can constitute an environmentally friendly building prototype. More than half of builders already are familiar with—if not using—low-flow water fixtures, low-E glass, Energy Star appliances, and whole-home air-filtering systems. With little effort, builders can continue to deliver these green home features, but also make simple component replacements—such as low VOC paints and adhesives, carpets free of toxins and mutagens, and others—to appeal to a market that may be willing to pay more for health benefits than for energy savings.

Builders interested in going green without reinventing the wheel may be able to repack what they already are doing, while incorporating simple health-inspired features to sell to the green market. This will allow them to cross-market to Greenback Greens and Forest Greens, whose needs will be met by the techniques being repackaged, as well as to Healthy Greens, who will provide the critical mass of market demand. By the time regulations have caught up with the cutting-edge practices developed by builders, the builders already will have taken a major step toward orienting their businesses to green development. If they suddenly find themselves hitting a sweet spot in the market, all the better. **UL**

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