

A Reprint from *Tierra Grande*



# Green House Values

By Harold D. Hunt

**G**reen building's "cool" quotient is on the rise. More and more new-home buyers are including green features in their lists of preferred amenities.

Some are motivated by increased concern for the environment. Others are interested in energy-efficient or environmentally friendly features because they may reduce overall homeownership costs. Either way, the buyers perceive a value attached to green components.

## Green Price Tag

Green components range from relatively inexpensive things, such as cellulose insulation made from recycled paper, to extremely expensive ones, such as solar electrical systems. The costs green upgrades add to a new home's price vary widely. However, a 3 percent to 15 percent premium is a good rule of thumb.

According to the National Association of Home Builders (NAHB) and McGraw-Hill Construction, 10 percent of new homes will be constructed using some green elements by 2010. The NAHB has been working with the International Code Council to develop the first national residential green building standard. The standard will address a number of issues including

energy efficiency, water conservation, building material recycling, indoor air quality and homeowner education.

## Value to Initial Homebuyer

For those who view value in nonmonetary terms, the benefit of adding green features to a new home is immediate. These buyers regard a reduction in the country's energy consumption, less contribution to deforestation and other means of improving the environment as reward enough.

Other homebuyers expect to gain more concrete value from the addition of green components by recouping the dollars they spent on the upgrades over time or when they sell the property. If the buyers added a more efficient, green heating and cooling system to lower utility costs, they could reasonably expect the system to pay for itself. If the new system costs an extra \$2,000 and the utility savings amount to \$500 per year, the homeowner would recoup the added cost in four years.

Recovering the added costs of green amenities when the initial owner sells the property is often less predictable. Consider bamboo flooring, for example. Bamboo is a rapidly renewable plant which, unlike timber, is not killed during harvesting. Bamboo is also harder than wood, resulting in a more durable

and longer-lasting product. An initial homebuyer might be willing to pay a premium for bamboo flooring, but when the home goes back on the market, prospective buyers may not consider it of value and therefore may not be willing to pay more for that amenity.

The difference in these two examples highlights the difference between *value in use* and *value in exchange*. Value in use is tied to the satisfaction of the current homeowner and can be measured in monetary or nonmonetary terms. Value in exchange is based on how much subsequent homebuyers in the market would actually pay for a feature or amenity.

## Value to Residential Appraisers

Residential appraisers are interested in estimating a home's value in exchange only. In a given market, if enough buyers refuse to pay for a particular amenity, appraisers will conclude that the amenity makes no contribution to the market value of a home.

Over time, housing markets recognize certain features as having exchange value. The critical point occurs when an amenity shifts from having value in use for a few "pioneers" who are willing to try something new to becoming widely accepted. At that point, the amenity shifts from a cost to the initial homebuyer to a feature with measurable exchange value.

Such a transition may take years. An automatic sprinkler system is an example of an amenity housing markets eventually recognized as having exchange value. Over time, appraisers have compiled data from a sufficient number of comparable home sales to determine that homebuyers are willing to pay more for homes with underground sprinkler systems.

The problem with many green features and building techniques today is their newness. Until they move past the pioneer stage in the marketplace, appraisers will have difficulty attributing any value in exchange to them.

## Value to Lenders

Lenders can choose to keep home mortgages they originate in their own loan portfolio. However, the more common practice is to sell the mortgages on the secondary mortgage market. This way, the lender's income is generated from the fees charged for putting together the loan, not from the interest charged on the loan itself. If the loan is sold, the lender is out of the loop.

Investors around the world then buy a wide variety of mortgage-backed securities in the bond market based on the interest income from the mortgages. The investors receive financial returns from the income the mortgages generate. They also take on risk, including the risk of mortgage default and prepayment, a risk that has increased of late.

While this process seems straightforward, the secondary market for mortgages is extremely large and complex. Because of the market's size, mortgages must be bundled together to attract the interest of large investors.

Therein lies the rub for homes with green features. Bundles of mortgages must be uniform. Home mortgages with unusual or different characteristics will draw more scrutiny from loan underwriters, lessening their suitability for bundling. If accepted, they may still be classified as more risky, and the homeowners could be required to pay a higher interest rate.

As a result, private loan purchasers have little incentive to consider purchasing the mortgages of "nonstandard" green homes under the current system. Even if green features yield some value in exchange, homes considered too outside the mainstream still may have a difficult time obtaining financing.

## Green Fallout

If green features cannot be included in the mortgage, homebuyers must pay cash for them over and above the required down payment. While some buyers may be financially able to

pay a premium for green features, many are not. This is unfortunate, because the lower utility bills produced by some green building practices would be most beneficial for low-income homebuyers.

Loan originators determine only whether a potential homebuyer can afford the mortgage principal, interest, property taxes and insurance. Utility costs, which can be a substantial part of a housing budget, are not considered. The result is that only buyers with the cash to pay extra for energy-saving green features can benefit from utility savings those features yield.

One way to assist homebuyers and accelerate the acceptance of green amenities is through government incentives such as tax credits and grants to help pay for green features. For example, the City of Austin offers grants and the federal government offers tax credits for homebuyers who purchase residential photovoltaic solar electric systems and other specified green components (see "Energy Efficiency Pays" in the April 2007 *Tierra Grande*).

Unfortunately, green features are often hidden behind walls. The bulk of homebuyers still see more value in the visible, aesthetic features of a home, such as granite countertops, than they do in green amenities.

Furthermore, many builders unfamiliar with green building techniques are hesitant to promote their use, slowing consumer acceptance. But protecting the environment and lowering the cost of homeownership is a winning combination that will be hard for homebuyers to resist in the long run. ♣

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## THE TAKEAWAY

Some buyers choose green amenities for their earth-friendly benefits; others want lower bills. Green features generally do not add to the value of a home until sufficient sales data show that homebuyers in the local market are willing to pay more for those features.



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**Tierra Grande** (ISSN 1070-0234) is published quarterly by the Real Estate Center at Texas A&M University, College Station, Texas 77843-2115. Subscriptions are free to Texas real estate licensees. Other subscribers, \$20 per year. Views expressed are those of the authors and do not imply endorsement by the Real Estate Center, Mays Business School or Texas A&M University. The Texas A&M University System serves people of all ages, regardless of socioeconomic level, race, color, sex, religion, disability or national origin. Photography/Illustrations: Real Estate Center files, p. 1.