The Green Homeowner

Attitudes & Preferences for Remodeling and Buying Green Homes

SmartMarket Report
Design & Construction Intelligence

2007
The Green Homeowner Issue

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connecting people_projects_products
Introduction

Harvey M. Bernstein, Vice President,
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We are truly excited to present this latest issue of our SmartMarket Report™ series. This SmartMarket Report, supported by the National Association of Home Builders (NAHB), provides quantitative insights into the opinions and decisions of homeowners and remodelers when they are making the decisions to buy or build green.

It was a tremendous effort to delve into the consumer mind-set. Combining it with the findings from our study of the green home builder—found in the Residential Green Building SmartMarket Report, issued in 2006 with support from NAHB—we gain a complete picture of the drivers behind green building in the residential construction market. This understanding is important because green construction continues to expand at a more rapid pace from year to year.

The residential construction industry is of primary importance to the U.S. economy, contributing more than 4% of the GDP. It comprises more than 50% of all construction activity in the U.S. As a result, tracking residential green building is a critical part of understanding the economic opportunities posed by sustainable design and construction.

However, there is another reason green homes are especially important to understand: They are the places in which we live, sleep and spend time with our families, where the quality of our air and the environmental impacts of our building materials matter most. With increasing public attention on what individuals can do to lower their environmental impact, we felt it was especially timely to understand those who have already made the choice to live green—whether through purchase of new green homes or through remodeling their homes sustainably.

As in all seven of the SmartMarket Report studies we have conducted into the green building marketplace, this research found that energy prices are an important catalyst for more green building. We also found that, like their home builder counterparts, green homeowners are motivated by their concern for the health of their families and their impact on the environment. In fact, improving health and helping the environment led to the greatest satisfaction green home buyers had with their new homes. It is clear that ethics are important to the future of this market.

For this report, we surveyed a representative sample of the 233 million households across the U.S. to find a representative group of green home buyers and homeowners remodeling with green building products and practices. Then, we explored who they were and what they thought, examining their motivations, opinions and preferences. We also analyzed those homeowners who are choosing to remodel their homes with green products and practices. With our housing economy struggling and mortgage rates increasing, more homeowners are electing to renovate their homes, making this market critical to understanding green building market opportunity.

We hope you find the latest in our green building market research as interesting as we do. Each time we delve into a new green building market, we find the results continue to point to this market growing in size and strength. As we move forward, McGraw-Hill Construction is committed to continuing to serve the construction industry as a leader in providing green building intelligence, resources and expertise through our publications, analytics work and the MHC Network database of construction projects and products.

“Improving health and helping the environment led to the greatest satisfaction green home buyers had with their new homes.”
Table of Contents

2 Introduction

4 Executive Summary: The Green Homeowner and Remodeler

6 The Shift Toward Green
  • The Change in Consumer Behavior
  • Advantages of Green Homes

8 Green Home Building Market
  • Outlook for Single Family Housing
  • Outlook for Residential Remodeling
  • Green Building Market Opportunity
  • The Role of Government

12 Market Intelligence on Green Homeowners
  • Awareness of Green Homes
  • Learning About Green Homes
  • Green Homeowner Demographics
  • Lifestyle and Needs of the Green Homeowner
  • Benefits of Green Homes and Satisfaction Levels
  • Promotion of Green Homes
  • Reasons Behind Purchase of a Green Home
  • Challenges to Purchasing a Green Home

22 Talking Green Building: The Green Home

26 Market Intelligence on Green Home Remodeling
  • Green Home Remodeling Market
  • Windows
  • HVAC
  • Doors
  • Roofing
  • Siding
  • Plumbing
  • Flooring
  • Cabinets/Countertops
  • Green Product Brand Awareness

32 Talking Green Building: Green Home Remodeling

34 Resources and Partners

Cover photos: top two photos © Adrienne Lake / John Wesley Miller Companies; bottom © Warren Bond, provided courtesy of Searle Consulting.
Talking Green Building: Green Ho

Green Remodeling and Renovation: Seville Bungalow, Atlanta, Georgia

Seville Consulting

Industry experts agree that when remodeling an existing home to be green, it makes the most sense to seal the existing structure to give it as tight an envelop as possible. Take Carl Seville’s advice: “In my opinion, spray foam insulation is one of the most effective ways to make your home healthy and efficient.”

How a homeowner gets their hot water is another area where efficiency can be addressed. Tanked hot water heaters—standard in most homes—are inefficient as they constantly reheat the water whether or not it is used.

When Carl Seville performed an EarthCraft renovation (www.earthcrafthouse.com) on a 1918 bungalow, he engaged both in the low-hanging fruit activities like air sealing and adding energy-efficient appliances and lighting as well as more significant green changes.

His results have been impressive, seeing utility bills lower than homes half the size, improved indoor air quality with lower levels of dust and reduction of sound pollution.

Facts and Features

Location: Atlanta, Georgia
Layout: Single family, five bedroom, detached garage
Home Size: 4,700 sq.ft. (expansion from 2,300 sq.ft. by finishing attic and small addition on first floor)
Cost/Square Foot: $100

Overview of Work
- Expanded home from 3 to 5 bedrooms.
- Transformed kitchen into casual eating and gathering area.
- Added a small front addition to first floor.
- Converted the attic into a second floor.
- Screened porch constructed at rear of house to provide unconditioned space.

Green Building Features
- Air sealing.
- Daylighting designs.
- ENERGY STAR appliances and lighting throughout home.
- Low VOC paint, wood floor finish and carpet.
- Comprehensive drainage plane on all exterior walls.
- Ground unpainted lumber, waste bricks and roof tiles for mulch or driveway underlayment.

Performance
- Improved performance test from .76 ACH to .24 ACH.
- Reduced gas use by two-thirds; reduced electricity use by half.
- Sixty-eight percent higher heat and hot water efficiency.
- Fifty-four percent more efficient cooling and lighting.

Carl Seville provides green building and remodeling consulting services for contractors, homeowners, and organizations; education, training, and presentations to industry and consumers, and general construction business consulting for contractors. For more information visit www.sevilleconsulting.com.
When Doug Carr and his wife Donna decided to remodel their 1890 Queen Anne Victorian home, they chose to do it with green practices and products.

“We are interested in building quality for the long-term. We plan on living in the house for at least another ten to fifteen years and it made sense to me to invest in green products that would provide long-term benefits.”

Like most of the research respondents, the idea that building green is the "right thing to do" also resonated with the Carr family as did the trade-offs between up-front costs and long-term benefits.

For example, when they selected their new dishwasher, they chose a more expensive Bosch unit because, “it was important to me to have quality appliances that used very little energy and water. It cost more up front, but it will save me on water costs, which are substantial in the Boston area.”

Carr, an architect by training and profession, found his information about green building products the same way as our average respondent—by using the internet. “The Internet has made researching and finding products so much easier than ever.”

Carr invested in adding 16 photovoltaic (PV) panels to his home. It was the most significant investment they chose to make, but it was one that they are most satisfied with. “Since installing the solar PV panels, our electric bills have been cut in half. My house is a small power plant, and I am making money off it. The system averages about 9 kW/day, and we use about half that and sell the rest back. This has a liberating effect: I don’t care about the cost of electricity anymore.”

The Carrs live in a Queen Anne Victorian home in Medford, Massachusetts, which was originally built in 1890.
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