Evaluation of Production Home Builders Marketing Green In the Sacramento Region

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A green production home builder/developer is coming to a neighborhood near you! But what shade of green? In the arena of sustainability, green building should include environmental sensitivity in: site use, building materials, energy, water, indoor air quality, and solid waste. Green building programs are providing a vast resource for builder/developers to understand what it means to be truly green. While energy efficiency is at the forefront of the green home trend, waste management, water conservation and health benefits are making their way into the production home market. Continuing the trend of greener production home building will require: further education of builders and buyers, the use of past successes to create new ones, and adoption of sustainable building standards by local agencies.

Green Builder Programs

For the most part, green home building is a voluntary effort, but according to a study performed by the National Association of Home Builders (NAHB) and McGraw-Hill Construction, last year saw a 20 percent increase in the number of green home builders in the U.S. The study also indicates that the number is expected to grow by another 30 percent this year.[1]

In early 2005 NAHB rolled out its Model Green Home Building Guidelines designed to move environmentally friendly home building concepts further into the mainstream marketplace. The guidelines address lot preparation/design, resource efficiency, energy efficiency, water efficiency/conservation, indoor air quality, and operation/maintenance. These guidelines provide a tool kit for builders to incorporate more green building features into homes and assist local home building associations interested in developing their own green programs.

In the new LEED (Leadership in Energy and Environmental Design) for homes program, shades of green are classified by levels of certification – certified, silver, gold and platinum. According to the originator, the U.S.Green Building Council, the program "emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality." [2]

In addition to these comprehensive national programs there are dozens of certification or labeling programs available to builders desiring to green their projects. These programs are popping up from non-profit membership organizations, local public agencies, regional home building associations, and utility districts. Although most of the programs are voluntary and builders can pick and choose which green options to implement, some agencies are mandating a level of sustainable building practices for residential construction.

So What's Out There?

Finding builder/developers marketing green homes in the Sacramento region is a fairly easy task.

Treasure Homes has a development of 32 single-family homes in Natomas (Fallen Leaf at Riverbend) built on an infill site. These homes meet the requirements of the California Green Builder program and feature: solar energy systems, radiant heat barrier, Smart Vent fresh air

systems, tankless water heaters, low-flow water fixtures, dual flush toilets, energy efficient lighting, engineered wood products, enhanced insulation, and energy efficient windows. The entire community will be constructed to meet near Zero Energy Home guidelines under the Building America program sponsored by the US Department of Energy. Building America is a private/public partnership that provides energy solutions for production housing.

Grupe Company is building 144 extremely energy efficient production homes in Rocklin (Carsten Crossings) within a large greenfield development called Whitney Ranch. These homes qualify for the Building America program and have also been submitted for certification in the LEED for Homes program. The sales manager at Carsten Crossings was happy to report that their homes are selling faster than the other homes for sale in the Whitney Ranch development.[3]

Another production home-builder, marketing green, has just broken ground in the Sacramento region. Pardee Homes plans to build in North Natomas, Rancho Cordova, and Stockton. Pardee recently became the first large builder in the country to commit to build all of its new homes in compliance with the ENERGY STAR® program. In addition, Pardee markets the Living Smart program that includes green features and options in the energy, water, earth, and health categories. With options like low voc paint, draught-tolerant landscaping, and flooring from sustainable and recycled materials they are paving a greener path. Pardee was named Production Home Builder of the Year at the 2006 NAHB National Green Building Awards.[4]

How about having a green home shipped to your site? LivingHomes is the first company to make LEED certified, prefab homes available to consumers nationwide. LivingHomes Founder and CEO Steve Glenn states, "As a company, we're committed to building some of the healthiest, most ecologically considered production homes available and we will use LEED for Homes both to clarify what we're doing and why – and to help our customers understand what's different and important vis-à-vis other production homes."[5] Each LivingHome is designed to attain at least a Silver LEED rating. Sustainable features, in addition to energy, include: a native landscape and rooftop garden, integrated storm water management which includes sub-surface irrigation, a cistern and grey water recycling system to divert sink and shower water for irrigation, paper based countertops and 100% recycled denim insulation. For projects on land with existing homes, LivingHomes works with The Reuse People to deconstruct the structures and donate the materials to Habitat for Humanity. Finally, to make it "cradle-to-cradle" compatible, the home has been constructed with materials and processes that will make it easier to disassemble and reuse in the future.

Although a LivingHome has not been built in Sacramento, it likely will be. Representatives from Treasure Homes, Grupe, and Pardee all indicated that green building is here to stay.[6]

Continuing the Trend

Our region would benefit from a "living laboratory" for green home building to further educate builders and buyers. Just such a laboratory is expected to be completed in Raleigh, N.C this fall. "The Mainstream GreenHome™ is being constructed using NAHB's Model Green Guidelines and it is anticipated that the lessons learned from this project will encourage the mainstreaming of

sustainable homebuilding nationwide." The home is designed as an idea home for showcasing green products, systems and techniques that could make sense for individual construction projects or large-scale developments. The home aims to: use 50 percent less fossil fuel and consume 50 percent less water than the conventional home; recycle or reuse 90 percent of all organic waste on site; recycle 75 percent of all construction and demolition waste; retain 95 percent of all storm water on site for reuse; create wildlife habitats; and provide exceptional indoor air quality with 95 percent of all products having low or zero volatile organic compounds. [7] The GreenHome will be available for tours. More projects like GreenHome will be instrumental in bringing green to the mainstream.

We can use past green-promoting successes to create new ones. In 1992 the US Environmental Protection Agency (EPA) introduced ENERGY STAR as a voluntary labeling program designed to identify and promote energy-efficient products to reduce greenhouse gas emissions.[8] The success of this labeling program has reached even the most remote communities and stretches far beyond just products Both builders and buyers have embraced the concept of energy-efficiency and it is the most commonly found green feature in production homes. The success of Energy Star can be used as a guide for starting new campaigns to promote other aspects of green like health and water efficiency. The Metroplitan Water District of Southern California, a cooperative of 26 cities and water agencies, has begun a voluntary labeling program for home builders who are "water wise". The program, called California Friendly Homes, is still in its infancy and will help builders/buyers embrace the concept of water efficiency.
More labeling programs that identify and promote environmental efficiencies will continue the trend toward greener homes.

Local public agencies will need to adopt and enforce policy to incorporate green building measures into the design of large home developments. Sacramento should follow the lead of The Alameda County Waste Management Authority who has adapted and enhanced national standards published by the U.S. Green Building Council. This checklist has been embraced by the City of Pleasanton, and in accordance with the City Green Building Ordinance, all new homes must achieve 50 points or more across three main green building categories—Indoor Air Quality, Energy Efficiency and Resource Efficiency. [9] The collaboration efforts that have already begun by the SACOG (Sacramento Area Council of Governments) Blueprint Project should be expanded into creating standards for green home building across the County.

Conclusion

Green production home building in the Sacramento region is a fairly light shade of green, but there is a sense that energy efficiencies will become commonplace and many builder/developers are already looking at other green choices such as water conservation and indoor air quality to stay ahead of the market. The national and local green builder programs are helping to promote green building, but more can be done. Constructing a showcase green home to educate the public about green buildings, supporting voluntary labeling programs which promote green building practices, and having local agencies adopt and enforce green home building policy will continue the trend toward greener production home building.

Notes

1. $19-38 Billion in Green Home Building Expected in 2010, June 12, 2006,. available from http://www.nahb.org/new_details.aspx, accessed 10-9-2006.

2. Janis, Amanda, Green Growth, September 9, 2006, available from http://www.thereporter.com, accessed 10-11-06.

3. Johnson, Morgan, personal interview by author, October 8, 2006, Rocklin, CA.

4. http:/www.pardeehomes.com, accessed 10-12-06.

5. http://www.livinghomes.us/press, accessed 10-12-06.

6. Barnes, Phil and Ragland, Mark and Fischer, Mark, interview by author, October 12, 2006, Sacramento, CA by telephone.

7. Cherokee Investment Partners Breaks Ground on Mainstream GreenHome of the Future, April3, 2006, available from http://www.prnnewswire.com/cgi-bin/stories, accessed 10-19-06.

8. http://www.energystar.gov/index.cfm, accessed 10-19-06.

9. http://www.globalgreen.org/publications/index.html, accessed 10-19-06.