



Going Green, Inside and Out

New laws are changing the market,
but some builders and developers
are ahead of the curve

By **Aimee Lewis Strain**

Manda Masterson became a believer in the green building movement when she opened the first utility bill she received as a new resident of the Southgate community in Petaluma. She thought PG&E must have made a mistake by undercharging her by approximately \$500. The real mistake, she now realizes, was not moving to a sustainable community sooner.

"It's amazing; we're saving about \$500 on our PG&E bill and close to \$300 on our water bill," she said. "For a family of six, that's incredible."

Masterson, her husband and their four daughters moved in March to the Southgate development from the other side of town, where they owned a 15-year-old traditional suburban home. That house was equipped with the same amenities you would find in any home built before the green movement. "It was old, dusty, moldy, the air ducts were dirty," said Masterson. Now, she said, her new 2,600-square-foot home is clean, has cool, fresh air flowing throughout and is less expensive to maintain and better for the environment.

A project of Delco Builders and Developers, Southgate is comprised of 216 single-family Craftsman-style homes that feature high-energy efficiency products like low e-coating windows and Energy Star rated appliances, drought-resistant landscaping, sustainable building materials and standard features that improve indoor air quality. The project was awarded the Build It Green certificate by the city of Petaluma and also given the GreenPoint Rated label, a third-party rating system that scores green homes.

The Mastersons are just one example of a rapidly growing number

of people looking to live or work in buildings created with sustainable products that also possess green amenities. In San Francisco's Mission Bay, residents of Intracorp's Arterra project have begun moving into the three buildings at 300 Berry St. The 16-story Arterra is San Francisco's first residential green high-rise, and it stands out in its efforts to propagate sustainability beyond its walls. The buildings feature two living roofs that help reduce heating and cooling costs while at the same time adding to the aesthetic of the building, the low E-glass helps reduce the glare, and the buildings themselves are wrapped in Trespa, a recycled façade material. On the inside, the units feature Energy Star appliances, while the carpet, varnishes and paint all come from organic compounds, improving the indoor air quality. On top of it all, Arterra also avails to its residents the use of a car-sharing service from Zipcar.

"The project is San Francisco's first truly green high-rise. We were all interested in doing the right thing, but at the same time we wanted to differentiate our project from the rest in SOMA. The Redevelopment Agency also wanted to see a green project in Mission Bay and really encouraged



By 2010, the value of green building is projected to increase by \$60 billion.

SOURCE: THE U.S. GREEN BUILDING COUNCIL

us to go green,” said Dean Givas, president and COO of Intracorp, San Francisco, Arterra’s developer.

The growing consumer desire to live sustainably, coupled with local and state green building legislation, is becoming a mainstay in the real estate market. Currently, more than 75 Bay Area jurisdictions are considering the passage of green building ordinances, and California last month became the first state in the nation to approve a statewide building code that mandates reductions in energy use, recycling of construction products, indoor air quality requirements and water conservation, among other things. The Green Building Standards Code takes effect in January and aims to reduce structural energy use by 15 percent, improve water usage for both commercial and residential plumbing fixtures and cut landscape water consumption in half.

“The tide has turned, the state is engaged in this effort,” says Rich Chien, a private sector green building coordinator with the city of San Francisco’s Department of the Environment. “This is now something a local jurisdiction can do to improve the environmental profile of a city. Green building will proactively save energy and water through the design and construction of a building.”



By 2009, 80 percent of the corporate market is expected to be engaged in green at least 16 percent of the time and 20 percent will be engaged in green 60 percent of the time.

Consumers are no longer the only ones driving the green market. Local and state regulations are mandating that builders and developers tweak their procedures to conform to, and in many cases voluntarily exceed, the new requirements. A colossal milestone for the green movement occurred earlier this year when the Homebuilders Association of Northern California recognized Build It Green’s GreenPoint Rating system as the main standard to follow.

“It’s pretty huge that the homebuilders’ association came out and endorsed green building standards,” says Chien. “They see public agencies doing it, communities want it more, and they may come to expect it. It is good forethought.”

David Langon, president of Langon Homes in Alamo, says his company just completed its first green project, Arbor Place, a development of six single-family homes in downtown San Leandro.

“This was our first green project, and it went really well. We had to really educate ourselves on what was out there, but luckily it’s getting much easier—there are a lot more products and suppliers available than there were a few years ago,” Langon says.

Arbor Place exceeded Title 24, the state’s energy compliance requirement, by about 20 percent with its recycled materials, low-use water installations and sustainable building components such as bamboo flooring and non-toxic paints. After completing the project, which will hold its grand opening in early August, Langon added that his company is committed to sustainable building for the long term.



Dean Givas, president and COO of Intracorp, photographed on site at Arterra



Arterra, San Francisco



David Langon, president of Langon Homes, photographed on site at Arbor Place



“This is not a fad, it’s something that’s here to stay,” he adds. “This is similar to how it was 15 years ago when we all used to throw our garbage in one big can and one day the garbage company gave us several bins and told us to separate things. We all thought they were crazy. Now we wouldn’t think of doing it differently. Green building is similar to that. It’s a concept that takes time, yet as time goes on what was once considered hard or difficult is now a part of everyday life.”

HOMEOWNERS CATCHING ONTO MOVEMENT

Chien, of San Francisco’s Department of the Environment, said the intended consequence of a simplified permitting process is that people are really catching on to the green movement. Still, a few roadblocks remain.

“The big barriers are cost and education,” says Chien. He says his four-person green team in San Francisco has been relentlessly working to educate people through real estate forums and neighborhood meetings, hoping to “plug them into resources they may not know about.”

Large cities like San Francisco are in the process of passing their own green building ordinances, and people are reading the news and becoming aware that they have options when it comes to green.

“With the San Francisco ordinance ramping up from an idea to a law, people have been watching, and they’re seeing where it’s all going,” says Chien. “This process has spurred a lot of interest because it is going through the legislative process.”

The San Francisco Board of Supervisors had its first reading of its ordinance (which among other things calls for any new development of 25,000 square feet or more to be LEED certified) in late July and has voted to adopt it. The ordinance would go into effect on Jan. 1, 2009 with residential restrictions going into effect in 2010. The mayor just signed it, as well, putting San Francisco a notch above any city in the country in its efforts to make green a new reality.

In the early days, when green building was just becoming popular, according to Los Gatos Environmental Design Consultant Sarah Du Von, green amenities were expensive, something she believes had stigmatized the market.

“As supplies have finally met demand, costs have gone down considerably. And people are starting to realize that there are a lot of incentives, through PG&E or Energy Star and sometimes even tax breaks that could save you money.”

Du Von, a LEED-accredited professional, said the top amenities requested by her clients include solar panels, low-flow toilets and tankless water heaters, low E-windows, green insulation, paints and other interior building products and properly sized HVAC systems. She says water is becoming a huge concern for people, too.

“Water efficiency is a big deal, and people are looking at irrigation sys-

tems, using natural plants native to the area that are drought resistant, zoning water from higher to lower use plants to spread out water use, low-flow sprinklers and even bubblers, so they’re not wasting water.”

On the commercial front, builders and developers are listening to their clients and providing them with greener amenities that have been proven to speed up productivity and provide a healthier environment, according to Du Von.

“There are a number of motives for building green from reducing a carbon footprint to indoor air quality for your personal health to indoor toxicity,” Du Von says. “There are several green amenities that can be added to an indoor environment that will make people more comfortable and will make them more productive.”

According to the US Green Building Council, Americans spend at least 90 percent of their time indoors, and indoor pollutants are substantially higher than outdoor levels. It’s findings like these that have people seeking cleaner indoor environments. Du Von says the hot amenities on the corporate wish list are low-flow plumbing fixtures, fluorescent lighting, natu-

“This is similar to how it was 15 years ago when we all used to throw our garbage in one big can and one day the garbage company gave us several bins and told us to separate things. We all thought they were crazy. Now we wouldn’t think of doing it differently.”

David Langon, *president of Langon Homes in Alamo*

ral indoor lighting and low E-windows. Interior building materials such as the wood, paint and insulation used are also items under consideration.

GREENING A COMMUNITY IN EMERYVILLE

Building green no longer rests its definition on what amenities are inside the structure. The LEED ND (Neighborhood Development) pilot program was specifically designed to advance the green movement through sustainable neighborhood design, and the nation’s first platinum certification under this pilot program was just awarded to TMG Partner’s Emeryville Marketplace Redevelopment Project. TMG will complete the development in association with Heller Manus Architects and landscape designers David Gates & Associates.

“By innovating and applying the highest LEED standards, we will create a sustainable community at a critical time when business and civic leaders must collaborate on solutions to global warming,” says Michael Covarrubias, chairman and CEO of TMG Partners.

The project comes at a unique point in time where we are beginning to witness an unprecedented intersection between communities’ desires and construction and planning best practices. The design team worked closely with the City of Emeryville, hosting more than 30 community meetings in a four-year planning and environmental review process in order to understand the needs of the local community in building an environment that would fit its purpose. At the final review hearing, the attention to local detail paid off as the Emeryville City Council voted by a 4-1 majority to rezone the Emeryville Marketplace site and allow a range of building types, some up to 175 feet in height. The new mixed-use development will include up to 1 million square feet of office, housing and retail stores to be built over the next 25 years.

“TMG Partners pulled together the best ideas of neighbors and the building industry to offer a plan that moves away from land dominated by the car and towards creating a lively urban place that will improve this area of Emeryville for decades to come,” adds Emeryville’s Mayor Ken Bukowski in a statement.

Another Emeryville project, called the OakWalk, is also vying for the coveted LEED ND certification and attempting to popularize the concept of walkable urbanization. This concept defines housing developments that provide residents with access to everyday needs and locations close to civic and retail centers and good transit access.

Located in Emeryville’s historic Triangle Neighborhood, OakWalk will consist of 53 condominiums and five turn-of-the-century single-family homes that were placed on stilts while the soil underneath was cleaned.

“This is an infill location; there was a four-block area that was damaged by paint thinners and other pollutants and solvents that we remediated,” said Stuart Gruendl, CEO of Bay Rock Residential, the developer of the project. “Only 5 percent of materials ended up in the landfill—95 was recycled off-site.”

Among the “quality-of-life amenities,” as Gruendl referred to them, each unit boasts numerous green conveniences, such as VOC sealants, paints and carpets, no air conditioning, bamboo floors, tankless water heaters and low-flow toilets and washers. The project is also a pilot for storm water cleanup. Throughout the development there are artificial basins, drainage basins in the form of tree basins and environmental-cleansing basins that clean runoff before it is dumped into the storm drain.

“All of these things were very costly, but something that is very important to the environment,” says Gruendl. “This is a statement development for us. We have this great coincidence where we’ve cleaned up and recycled a site, and it is a nice coincidence to relocate and rehabilitate the existing fabric of the historic Triangle neighborhood,” he says.

AREAS OF OPPORTUNITY

Two areas of the industry where the green movement has yet to make significant strides is in existing homes and existing commercial buildings. In California, 75 percent of homes were built before 1978, which is when the first energy code was adopted in the state, according to Chien.

“In this sector, we are dealing with a range of resource and financial issues—who will do the remediation—it costs money and is inconvenient,” he says.

Alex Wang, broker-owner and realtor with Rainmaker Properties in Palo Alto, says that as codes get implemented, owners of existing homes will begin to replace the items inside them. But there’s much to be done still. Wang says with the number of resale homes he shows, few of them are completely green, but many possess green amenities like low-flow plumbing fixtures and fluorescent lighting. He says many clients are requesting non-toxic paint, but none of the green amenities have become a deal breaker for any of his buyers or sellers.

“There’s also a trend toward the more planned community where all the amenities are within walking distance,” Wang says.

But, he says a majority of his clients still have their eyes cast on the tree-lined street with a large yard—what has always been billed as the American Dream. As the trend turns into reality and more people become aware of the impacts their desires might have on the environment and its resources, the American Dream may very well one day be a cooler shade of green. ■

“There’s also a trend toward the more planned community where all the amenities are within walking distance.”

Alex Wang, broker/owner and realtor with Rainmaker Properties in Palo Alto

Top to bottom:
OakWalk, Emeryville
Emeryville Marketplace, Emeryville



By 2010, the green building market is projected to be worth \$30 billion to \$40 billion annually.

