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Green Building Industry To Prosper With New Initiatives

Jeff Jeannette, owner of Jeannette Architects, Inc., a full service custom residential architecture firm, stands on the roof of a green home in Belmont Heights. The company designs new energy-efficient homes, additions and remodels, with some that are LEED or Build-It-Green certified. (Photograph by the Business Journal's Thomas McConville)

California's Charge Toward Energy Efficiency Aims To Spur Job Growth

■ By **Sean Belk**
Staff Writer

Homeowners looking to upgrade their properties with energy-efficient improvements can breathe a sigh of relief as new initiatives in California are expected to offset the cuts made to federal tax credits this year.

The tax bill passed by Congress slashed residential energy credits, now covering 10 percent instead of 30 percent of improvement costs and reducing maximum cumulative credit from $1,500 to $500. But contractors, investors and government officials in California anticipate energy-efficient upgrades to become more streamlined and affordable this year with new rebate programs and financial incentives expected to continue the push toward new jobs in the green building industry.

One such initiative is called Energy Upgrade California, to be rolled out as early as this month. As an alliance of California counties, cities, non-profit organizations, government agencies and utility companies, the program provides new rebates for cost effective improvements such as insulation, low-flow water-saving devices and heating-and-cooling systems.

"California's doing something a little bit different here," said Wes Harding, president and owner of Harding Construction & Sustainable Solutions in Long Beach. "We're going way beyond what the federal tax incentives ever were in terms of what the utilities and what the California initiative is trying to offer through this rebate program. It really should hopefully get some people back to work."

The unprecedented program provides homeowners with rebate amounts based on the percentage of increased efficiency to the home, which most aren't even aware of, said Harding, a BPI-certified home performance specialist, who helps homeowners navigate rebates and currently teaches a sustainable building course at California State University, Long Beach. Depending on the depth of the energy retrofit, California homeowners have the choice of following a prescriptive path for a $1,000 rebate and the possibility of up to $4,500 in rebates, requiring a certified contractor to facilitate the process.

While the program is still being worked out, the initiative totals $304 million in

Wes Harding, owner of Harding Construction & Sustainable Solutions, installs cellulose insulation in an attic at a home in Naples. Cellulose insulation contains more than 80 percent recycled content and is more effective than conventional insulation. (Photograph by the Business Journal's Thomas McConville)

available funding for rebates statewide, paid for by a combination of state and federal grants, with the entire funding cycle lasting until 2013, according to Melinda Barrett, spokesperson for Los Angeles County's Office of Sustainability. The program plans to retrofit 28,000 single-family homes and 2,000 multi-family homes, equivalent to removing 36,287 metric tons of greenhouse gases. Harding said most L.A. homes were built prior to modern energy efficiency standards and are inefficient and outdated, leaking heat and gas.

A majority of the rebates are being administered through the state's investor-owned utility companies, which include Pacific Gas & Electric, Southern California Edison, Southern California Gas Company and San Diego Gas Company, in addition to publicly owned utilities, according to Barrett. Additional rebates are being offered through the state's various counties.

For homeowners in Los Angeles County, the program caps at $70 million with $35 million going to utility companies and the other half going to the county. The program works so that the utilities offer rebates of up to $4,500 while the county offers an additional $500 rebate for projects that get more than 20 percent in reduction in energy use, Barrett said. "It's intended to help homeowners save money, offsetting the initial up-front cost of doing this work and to create jobs and stimulate the contracting industry," she said.

Harding added that a majority of companies that would benefit from the added business would be construction and remodeling contractors in addition to general contractors, energy auditors and administrators. But, regardless of being more environmentally conscious, most homeowners would be attracted to the aspect of saving money alone, he added. "To some people [it] might be a touchy subject, but who doesn't want lower utility bills?" Harding said. "I think California in general in our own little micro climate it feels like there's been a change, and people are out there to do something and remodel and they do want to go green if they can."

The new program also aims to reduce confusion by streamlining the multitude of rebate offerings, financing programs, available contractors and other resources into one Web site at www.energyupgradecalifornia.org, expected to be fully operational sometime this month, Barrett said. "The beauty of the statewide program is that everybody's going to be using the same branding and the same Web site," she said. "Folks can go to that site, put in their address or their zip code and find out exactly what's available to them locally. The state will also have sort of a clearing house of all the kinds of financing available for these kinds of upgrades."

Certified Green Building

As part of the Energy Upgrade California program, homeowners are also afforded the option of getting their home certified green. The program offers a $600 rebate toward green point-rated existing home certification, administered by Oakland-based Build-It-Green, a non-profit created in 2003 that created a rating system for homes with the credibility of being upgraded to a high standard with third party verification.

Tenaya Asan, program manager for Build-It-Green, said the organization was designed to primarily focus on providing a green rating system for the residential sector while Leadership in Energy and Environmental Design (LEED), developed by the non-profit U.S. Green Building Council, focuses more on commercial buildings. The program services new and existing single-family and multi-family homes.

She said the organization already has more than 15,000 homes either certified or in preparation for assessment. "It provides a credible entry point and goes up from there," Asan said. "We wanted to transform the whole industry."

For new homes, Asan said the organization is developing a climate calculator to provide quantified benefits for those homes that have qualified for green-point rated in terms of energy saved water and green house gas emissions. The tool would help builders conform to California Environmental Quality Act (CEQA) entitlements for large projects, she said.

Energy Efficient Mortgage

Another financial tool is what's called an Energy Efficient Mortgage (EEM) through the Federal Housing Administration (FHA), primarily for energy efficient improvements when purchasing or refinancing a home.

Harding said the EEM allows homeowners who apply for an FHA loan to get up to 5 percent of the median home price toward energy features. And if qualified for the loan, borrowers automatically qualify for the EEM. Most often, the increase in the monthly payment will be offset by a reduction in the utility bills, he said. Typically, EEM upgrades include insulation, sealing ventilation ducts, sealing the building, lighting, and renewable energy and replacing windows.

However, Harding added some realtors have shied away from promoting the mortgage since they think it's going to hold up a project or that it becomes too confusing. "If you're a first time homebuyer and you're trying to come in and you're already maxed out with down payment and everything else, here's a great way to finance a home improvement project and lower your utility bills at the same time," he said.

Other financing options are the Property Assessed Clean Energy (PACE) financing, which allows property owners to finance upgrades through reimbursements on property tax bills. While the program is available for commercial properties, Barrett said the residential portion is currently on hold by Fannie Mae and Freddie Mac.

Low-Income Energy Efficiency

Energy-efficiency initiatives are available in areas where residents might not be able to afford the initial up-front cost, as well. The Long Beach Community Action Partnership (LBCAP) received $17 million in grants last year for energy efficiency improvements and other assistance to lower-income homes in a 540-square-mile radius, including cities in Eastern Los Angeles County.

Darick Simpson, executive director for LBCAP, said the programs include offering utility bill assistance and a program called Low-Income Energy Efficiency (LIEE) for weatherizing homes through Southern California Edison. He said in 23 weeks of providing the utility bill assistance program the organization served 6,386 households, and encumbered $2.1 million. In addition, there have been about 200 households that have been weatherized out of a goal of 1,400 homes. "The owners get the benefit of having their property upgraded at no cost to them," Simpson said. "So it's an incredible value for the owner and also a benefit of the inhabitance of the property."

While the initial grant helped create more than 50 jobs at both LBCAP and the Los Angeles Conservation Corps, he said funding might be reduced in the immediate future.

"We have to be mindful of the fact that we'll be cut back," he said. "Some say 30 percent some say 40. So we will have the contract, but it will probably mean we will have to serve fewer people, unfortunately."

Residential Rebuilding

While financial incentives aim to continue energy retrofits, some homeowners are going even further with remodeling or rebuilding. Greg Morse, for instance, a Naples resident and local business owner, decided to deconstruct his entire 1938 home and is rebuilding it with state-of-the-art energy efficient features. He said his home now would use 50 to 70 percent less water than the average house, and eliminates his electricity bill after installing solar panels, lasting for the next 100 years. "It was important for me to think about the long term," he said. "My goal was to build a home that wouldn't use energy over its life time."

In addition, Morse recycled materials from the deconstruction, which were mostly made of redwood, that were made into doors. Long Beach currently requires through its new building code that any new substantial construction project recycle at least 60 percent of materials.

Some of the energy efficient features Morse is adding include having his entire home run on electricity only and eliminating the need for gas, by installing electric stoves, ovens, dryers and water heaters. For many upgrades he was able to benefit from local, state and federal tax rebates, he said. Having his main source of power from solar panels allows him to have what he calls a "net zero energy house," where it produces more energy than it consumes.

Another key feature was to be able to conserve water, so he installed a grey water system using a separate set of pipes that collects water from showers and wash basins to irrigate the outside of his home.

While states with more extreme weather would have more of a financial case for major energy efficient upgrades than in California's temperate climate, using less water and eliminating his electricity bill increases the resale value of the home, in addition to helping the effort to conserve water in California where there's a water shortage. Plus, adding the features now rather than later pays off in the end, Morse said.

Jeff Jeannette, owner of Jeannette Architects based in Belmont Heights, who designed Morse's rebuild project along with other green projects and remodels in the area, said there's a lot that can be done in rebuilding a home that won't necessarily add costs such as utilizing daylight with skylights and the placement of windows.

In addition, more residents are choosing more environmentally safe standards in construction, such as using low volatile organic compound (VOC) paints and materials, low-emitting carpets and formaldehyde-free dry wall.

"The green movement itself has changed the way people think about their home, that's for sure," he said. "All in all, conservation really needs to start with the people and owners that inhabit the homes."

Commercial Green Investment

Meanwhile, on the commercial side, there have been large investments in energy efficient upgrades in the last few years that are expected to continue, according to Barry Neal, director of Wells Fargo's environmental finance group.

According to the latest environmental finance report, Well's Fargo deployed more than $1.3 billion in capital for renewable energy projects, green buildings and green businesses last year, with a total of $8 billion in loans and investments to customers and projects since starting the program in 2005.

Despite the downturn in the real estate markets due to the economy, Neal said the green building sector has flourished. "It clearly slowed down during the economic recession, but at the same time there's still tremendous demand for green buildings," he said. "We expect that sector to continue to grow."

The emerging sector of green commercial buildings, most of which are certified LEED, continues to strengthen in response to regulation such as the state's California green building code, called CALGreen, which started the baseline for mandatory standards this year, in addition to more demand from tenants, Neal said.

More and more buildings are being retrofitted with solar panels today, he added. Kohl's, for instance now has solar panels on the roofs of its Lakewood and Seal Beach locations. Wells Fargo alone has invested in about 200 commercial-scale solar projects over the past four years, in addition to water-conservation projects at schools and universities, either owning or financing systems. ■