



The California New Homes Program **CONNECTION**



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SCE California New Homes Program

Welcome to *Connection* – the newsletter of the SCE California New Homes Program

Hello everyone,

We are already entering the last quarter of the year and it seems unbelievable that the year is almost over. For the housing industry as well as the overall economy, it has been a tough year. Economists still cannot put their finger on when the housing market will turnaround but we take each day as it comes and strive for the best.

In September, Sam Rashkin, National Director of Energy Star® Homes, came out to SCE's CTAC training facility and conducted a workshop regarding the 2011 Energy Star specifications for residential new construction. As Sam answered the questions "What is an Energy Star home?" and "What is a green home?" we were all reminded that an Energy Star home and a green home begin with energy efficiency as the foundation.

An Energy Star home defines "energy efficient" by having rigorous specifications and third-party verification and recognizes build-

ers through a government backed label and website, providing marketing support and national awards. Benefits to builders include but are not limited to: greater customer satisfaction, market differentiation, environmental integrity, and low risk for legal problems.

The California New Homes Program helps alleviate the costs of higher efficiency standards by offering incentives of \$400 or more per home for an Energy Star development. For more information on how to qualify go to www.sce.com/builder.

Energy efficiency is fundamental. Health, safety, comfort and sustainability should be the mainstay of a home.

Homebuyers who purchase an Energy Star home have a product they can be extremely proud of; and when there is a proud homeowner, word gets around.

Sincerely,
John Morton, *Program Manager*

The BUZZ

Upcoming Events:

Building Industry Show

November 19-20

SCE is a proud sponsor of the 2009 Building Industry Show (BIS) conference! BIS is a two day conference where builders and other professionals gather to network, celebrate achievements, and learn about industry innovations.

<http://www.buildingindustryshow.com>

Location: Long Beach Convention Center

Build It Green CGBP and Advanced CGBP Trainings

December 1-4

Build It Green will lead its two-day, 16 hour, Certified Green Building Professional course, which covers the overarching principles of green building. The Advanced CGBP course will also be offered.

Location: City of Fullerton, Maintenance Services Complex, 1580 W. Commonwealth Ave, Fullerton, CA

EPA Celebrates One Million ENERGY STAR Homes Built!

In November of 2010, EPA will celebrate having one million ENERGY STAR qualified homes built nation-wide since the program launched in 1995. This milestone highlights that home builders and home buyers continue to see the value in homes that provide greater comfort, save energy and money, and help fight climate change.

You can be a part of the celebration! The EPA ENERGY STAR for New Homes Program is collecting testimonials such as the one below from ENERGY STAR qualified home owners to feature on their website.

“We’ve always been impressed with the savings we’ve gotten from ENERGY STAR CFLs and appliances, so we knew ENERGY STAR would be a smart choice for our first homes too. But it’s not just about the savings. When researching builders, we liked that KB Homes was such a progressive builder. They really build with cutting-edge technology, and the environment in mind. Protecting the environment is important to us too – and ENERGY STAR gives us one more way to be a part of the solution.” Leona Fisher and Will Sankhla, Southern California.

Southern California Edison is a proud partner with the EPA ENERGY STAR for New Homes Program and we are very pleased with the number of ENERGY STAR builders participating in the Program. We encourage you to take this opportunity to have your homeowners highlight your dedication to energy efficient construction by directing them to visit www.energystar.gov/onemillionhomes to submit their story directly online.



REVISED INCENTIVE REQUEST FORM

CANHP's Incentive Request Form has been revised to ensure faster filling out and processing. This form is now available only in PDF form. The revised form will be the only form accepted going forward. You can find a copy of the revised form on the CANHP website, on the "Supporting Documents" page:

<http://www.sce.com/b-rs/bb/cali-new-homes/documents.htm>

PROJECT ELIGIBILITY DURATION EXTENDED

SCE has decided to extend CANHP's project eligibility duration so that all new projects committed to the Program will remain active in the Program for thirty-six (36) months rather than the previous duration of thirty (30) months.

In the Spotlight

Lennar Homes Inland Empire

Lennar Homes—Inland Empire

Our ENERGY STAR this quarter is Lennar Homes Inland Empire who have shown their commitment to energy efficiency by committing 4 projects to the Program for a total of 226 homes! These homes are built at the Tier-I level (15% above code) and include solar PV panels standard. Lennar is also taking advantage of CANHP's prescriptive measure

options, receiving additional incentives for the ENERGY STAR appliances they are installing. By combining energy efficiency, solar PV panels and ENERGY STAR appliances Lennar is showing their customers that they are committed to environmental sustainability and to saving their customers money. Their commitment will help them get more customers today as well as helping future generations enjoy a cleaner planet.

The Evolution of the ENERGY STAR for New Homes Guidelines

The ENERGY STAR for New Homes program was launched in 1995. The initial Program guidelines stayed in effect for 10 years with only a few regional modifications. In response to increasingly rigorous codes, standards and construction practices, the Environmental Protection Agency (EPA) introduced more stringent guidelines in 2006.

In this second version of guidelines, additional requirements such as efficient water heating and lighting standards were added. The HVAC equipment had to be properly sized in accordance with the ACCA Manuals J and S, ASHRAE 2001 Handbook of Fundamentals, or an equivalent computational procedure. No longer was it a “one size fits all” approach – over-sizing of equipment was no longer allowed. Also introduced in the 2006 standard were the Quality Insulation Installation and the Thermal Bypass Checklist requirements. To limit air flow (thereby increasing efficiency) a complete air barrier had to be used on all six sides of the building envelope components. The use of infrared cameras exposed the pressing need for a complete air barrier. The Quality Insulation Installation helped to control the heat flow and the air barrier worked to control the air flow; together these improvements greatly increased a home’s efficiency.



As codes and standard practices are again ramping up across the country, EPA is releasing a third-generation of ENERGY STAR qualified homes guidelines that will become mandatory in 2011. These new guidelines for ENERGY STAR qualified homes are being designed to ensure that homes that earn the label continue to represent a meaningful improvement in energy efficiency over homes that are built to code or standard builder practices. These new guidelines, referred to for clarity as ENERGY STAR 2011, will help EPA meet its broader goal of transforming the housing industry to build homes with less environmental impact and increased homeowner benefits, including greater affordability through lower energy bills along with improved comfort, indoor air quality, and durability.



While the requirements are not yet finalized, the 2011 specifications will concentrate on a whole house as a system approach. Thermal Envelope, HVAC, water managed construction, ventilation and an increased level of 3rd party quality control are all being proposed for the new standard. *Homes will still be able to achieve compliance by either a prescriptive or performance path, though all homes must include certain mandatory measures.*

EPA has received comments from partners and other stakeholders regarding the proposed 2011 specifications. EPA is currently reviewing submitted comments on the proposed guidelines and a summary of comments and EPA’s responses will be made available shortly along with the revised specification. A second public comment period will be available in November for responding to this next iteration of the proposed specification.

More information regarding the specifics of the new 2011 ENERGY STAR standard is available on the Web at: <http://www.energystar.gov/homes>.

To help partners, ENERGY STAR is offering a series of web-based trainings. With an internet connection and a telephone, you will be able to watch the presentation, ask questions, and download handouts. Topics include:

- *Complementary Labels - Indoor airPLUS and Advanced Lighting Package.* October 21 from 2-3 p.m. ET
- *How to Sell ENERGY STAR Qualified Homes.* November 4 from 2-3 p.m. ET
- *ENERGY STAR 2011.* November 18 from 2 -3 p.m. ET

For additional details and to register, [click here](#).

NEW ENERGY STAR PARTNER LOCATOR

The EPA recently posted an updated partner locator web page. There are several improvements, including the ability to search by city location and interactive maps to locate builders. Active ENERGY STAR Partners should visit the site and review their listing in order to ensure that it is correct. The partner locator can be found by the following link:

http://www.energystar.gov/index.cfm?fuseaction=new_homes_partners.locator

The Psychology of Energy Efficient Home Sales

When discussing how to assist builders with the sales of energy efficient homes, the California New Homes Program (CANHP) team came up with a few ideas. We currently offer Sales Agent Training in which a CANHP representative will come out to a new residential development or to a location preferred by the builder to teach the sales agents how to sell an Energy Star and/or energy efficient home. The team rep will conduct an informal training session that answers potential homebuyers' three main questions: "What is an Energy Star home?" "What is an Energy Efficient home?" and "What differentiates these homes from others?"

Answering those three questions is paramount to educating consumers on the quality product they are buying and to the success of selling energy efficient homes.

In the September/October 2009 edition of "Energy Biz" (volume 6/issue 5), there is an article by Robert B. Cialdini, Chief Scientific Advisor for Positive Energy USA, about "The Psychology of Efficiency." In his article Robert talks about an experiment he and his colleagues conducted to see which social norm message is most effective in getting hotel guests to cooperate with hotel management in saving energy and the environment by reusing towels. The three social norm approaches or messages were:

1. "Help save the Environment"
2. "Partner with us to help save the environment"
3. "Join your fellow guests in helping to save the environment"

The outcome was the third message increased towel reuse by 34%. Robert states, "It's instructive that the normative message was significantly more successful than either of the more traditionally employed appeals, was costless to the hotel, and was entirely honest, and yet had never been employed in any hotel we had ever visited." He states that "the most basic kind of social norms refer to what most others do in a situation – what is considered normal. Research has shown that, in several settings, simply informing individuals of others' energy usage dramatically influences their own usage."

Try a fresh approach. The use of a normative message when selling energy efficient homes may be the key to increasing your sales. For example: *"Join your fellow neighbors in helping save the environment. Purchase an Energy Star/Energy Efficient home."*

Other Axioms for Selling Energy Efficient Homes

- **Expound the "True Cost" of Home Ownership**—This includes utility bills over the period of ownership.
- **Explain How the Value of Energy Efficiency Increases Over Time**—Energy prices are only going to increase.
- **Translate Features into Benefits**—What are the benefits of Quality Insulation Installation or Low-E Glass? Your salespeople should know how explain these benefits to a potential customer.
- **Reinforce the Message with the "Silent Salesperson"**—Displays showing the energy efficiency features of a home can act as "Silent Salespersons" to help drive home the message.
- **Commit to Telling Your Story**—Why are you building ENERGY STAR homes? What is the story of each house (3rd party verification, quality design and construction, etc.)

CANHP Account Managers are available to give a sales agent training to your staff. This is a great opportunity for your sales staff to learn more about the key to selling energy efficient homes! If you are interested, please contact Sue Higgins at (818) 325-3151 or send her an email at shiggins@icfi.com.



Technical Corner: Cool Roofs

By CANHP and Alexis Wong (Cool Roof Rating Council)

Starting January 1, 2010 the California Energy Commission (CEC) 2008 Building Energy Efficiency Standards will include mandatory requirements for insulation and roofing products for residential and steep slope applications, including introduction of the Solar Reflectance Index (SRI) for cool roof compliance. A "cool roof" has high solar reflectance and thermal emittance on the outer layer or exterior surface of a roof. The high solar reflectance has the ability to reflect light, thereby reducing heat transfer into the building. A high thermal emittance is the ability of the heat to escape from a surface once it is absorbed.

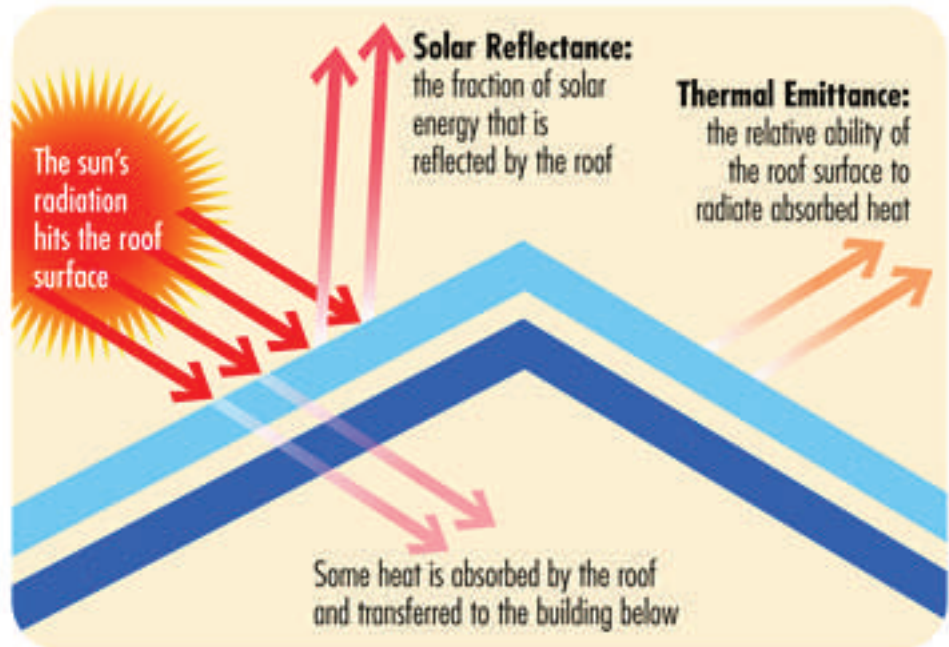
The Title 24 Energy Efficiency Standard requires that roofing products be rated by the Cool Roof Rating Council (CRRC) for reflectance and emittance similar to the National Fenestration Rating Council (NFRC) for glazing products. Roofing products must meet the minimum reflectance and emittance values cited in Title 24. The CEC will now require 3-year aged solar reflectance values. If aged values are not available, the CEC provides a calculation for aged reflectance. The "Rated Products Directory" tab included on the CRRC website displays the reflectance and emittance values of all their rated products (about 1,500). You can search the website by product type, manufacturer, color, roof slope, and minimum reflectance or emittance. This makes the CRRC website an excellent resource for builders, roofing subcontractors and architects.

Roofing products are qualified using the Solar Reflectance Index (SRI). SRI is a value that is calculated from reflectance and emittance values. For compliance with Title 24, SRI must be calculated from the reflectance and emittance values provided by the CRRC. Additional considerations include where the project is located (climate zone) and the degree of the slope of the roof (low slope versus steep slope). All variables should be considered when selecting roofing products.

There are two notable exceptions to the cool roof requirements: roofs with integrated photovoltaic panels and roofs with a thermal mass over the roof membrane of greater than 25 pounds ("green roof"). There are also decreased reflectance/SRI values allowed for roofing products greater than 5 pounds per square foot – this allows for products with thermal mass (e.g. tile) to qualify. Basically these materials are given a boost for the thermal mass and ventilation properties they provide.

The concept of cool roofs promises to save energy by reducing the need for air conditioning in buildings. The co-benefits of cool roofs are climate change mitigation and the reduction of the urban heat island effect.

Additional information can be found at the following websites: <http://www.energy.ca.gov/title24/coolroofs> and www.coolroofs.org.



Source: Cool Roof Rating Council



Types of Cool Roofing Materials

Source: Lawrence Berkeley National Laboratory