



ENERGY STAR Program Overview

Kathy M. Diehl
Regional ENERGY STAR Program Manager



SCE Customer Technology Application Center
September 11, 2009

ENERGY STAR Program

- Overview ENERGY STAR Program
- Products
- Homes
- Tax Credits
- Partnerships
- Region 9 Activities
- Recap/Websites/Contacts



ENERGY STAR Overview

ENERGY STAR

- Integral part of EPA's Climate Change Program
- Introduced in 1992 as a voluntary labeling program designed to identify and promote energy efficient products, i.e., computers and monitors
- The ENERGY STAR label is now on many additional products as well as new homes and buildings & plants
- Saved businesses, consumers, organizations \$19B
- Prevented 43 MMt GHG (29 M vehicles)



ENERGY STAR Products

More than 50 product categories

- Appliances – clothes washers, dishwashers, refrigerators
- Lighting – compact fluorescent bulbs, residential light fixtures (recycle bulbs – Home Depot)
- Heating & Cooling – central AC, furnaces
- Home Envelope – windows, doors, skylights
- **ENERGY STAR products can save 15-20% on energy bills**



Product Purchasing & Procurement

Residential Product Categories

- Construction – Windows, Cool Roofs
- Residential Appliances
- Residential Heating & Cooling Product
- Residential Lightning Products



Product Purchasing & Procurement

Product Category Tools & Resources

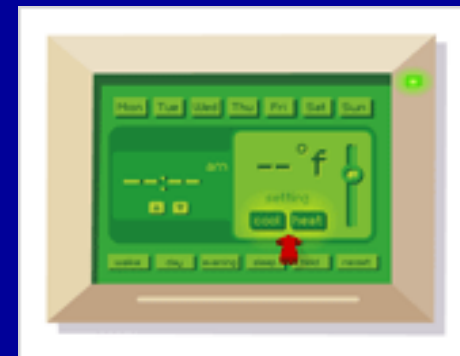
- Savings Calculator
- ENERGY STAR Qualified Models
- Key Product Criteria
- Sample Procurement Language
- Store Locator



Residential Heating & Cooling

THERMOSTATS

- Savings Calculator
 - Net life cycle savings
 - Life cycle energy saved
 - Life cycle GHG emission reduction

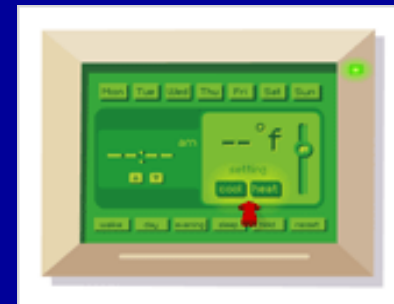


Residential Heating & Cooling

THERMOSTATS

Key Product Criteria

- Shipped with default energy saving program capable of:
 1. Maintaining two separate programs to address different comfort needs of weekdays and weekends
 2. Four temperature settings or more for each day



Buy ENERGY STAR Products in Bulk



ENERGY STAR® Quantity Quotes

CONNECTING BUYERS WITH SUPPLIERS OF ENERGY-EFFICIENT PRODUCTS

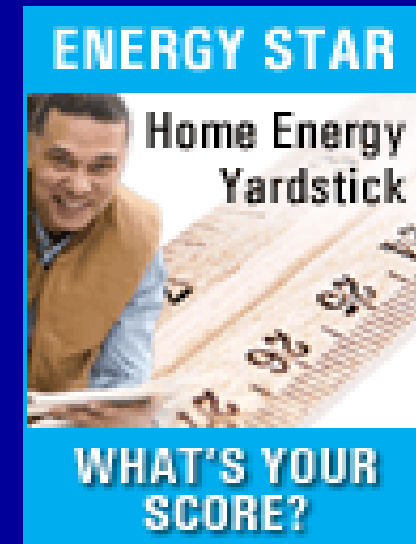
Register so you can use **ENERGY STAR Quantity Quotes** to:

- Submit purchase requests for ENERGY STAR qualified products
 - Air conditioners
 - Clothes washers
 - Dehumidifiers
 - Refrigerators
 - Dishwashers
 - Light fixtures/bulbs
- Get multiple quotes from product suppliers
- Negotiate discounted prices

ENERGY STAR for Existing Homes

HOME IMPROVEMENTS

- Common Home Problems
- Home Energy Yardstick
- Home Performance w/ Energy Star
- For Contractors



Find Solutions to Common Home Problems

- Website lists common problems, how to diagnose them, and a prescription checklist
- Example Problem:
 - High Energy Bills
- Diagnosis: Increased price of energy, inefficient components (windows, HVAC equipment, ducts, insulation)



Prescription Checklist

Start with an evaluation of home energy use to compare your home with Home Energy Yardstick

- 12 months of utility bills (Contact Utility and/or sign up for 'My Account' at www.sce.com)
- Zip Code, age of house, square feet, number of occupants
- Electricity, other energy sources (Natural Gas, Fuel Oil, Propane)



Prescription Checklist

- Turn down water heater to 120° Fahrenheit
- Install ENERGY STAR Programmable Thermostat
- Contact your Utility
- Hire a contractor



Home Performance w/ ENERGY STAR

- U.S. EPA, DOE Program offers whole-house solutions to homes with high energy bills, comfort problems
- Managed by a local sponsor that recruits home improvement contractors
 - Trained in building science principles
 - Qualified to perform comprehensive home assessments



Home Performance w/ ENERGY STAR

- Assessment includes
 - Heating and cooling systems
 - Windows
 - Insulation
 - Flow of air into and out of the house
 - Safety check of gas appliances



Home Performance w/ ENERGY STAR

- Contractors offer solutions to fix comfort and high energy bill problems
- Turn recommendations into improved homes
- Contractors complete needed renovations or work closely with other contractors



Application of mastic

Home Performance w/ ENERGY STAR

Upon completion:

- Contractor reassesses home's performance
 - Document improvements properly installed
 - Achieve promised energy savings
- Quality assurance reviews (5% of jobs) by Third Party Sponsor
 - Ensure projects meet program standards
 - Homeowners assured of high-quality work



Home Performance w/ ENERGY STAR

Laney College, Oakland CA

- Laney Building Performance & Energy Efficiency Technician Certificate



- Segment on Home Performance w/ ENERGY STAR
- Program commenced May 2009

ENERGY STAR Resources for Contractors

Remodelers, Home Improvement Consultants, Insulators, and HVAC Specialists

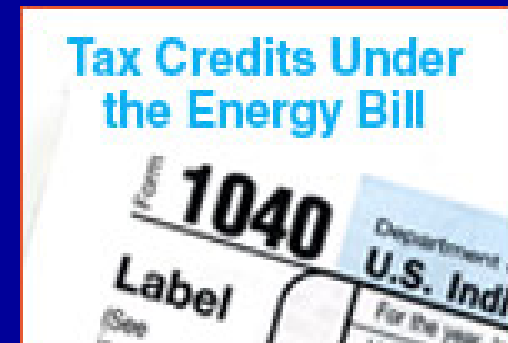
- Practices increase revenues, improve customer satisfaction, homes perform better
- Educational resources to explain benefits of services to homeowners:
 - “Guide to Energy Efficiency Heating and Cooling”
 - “Seal and Insulate with ENERGY STAR Brochure”
- Order on-line at [ENERGY STAR Publications](#) or at ENERGY STAR Hotline at 1-888-STAR-YES (1-888-782-7937)



Federal TAX Credits for Home Builders

\$2,000 tax credit for a new home

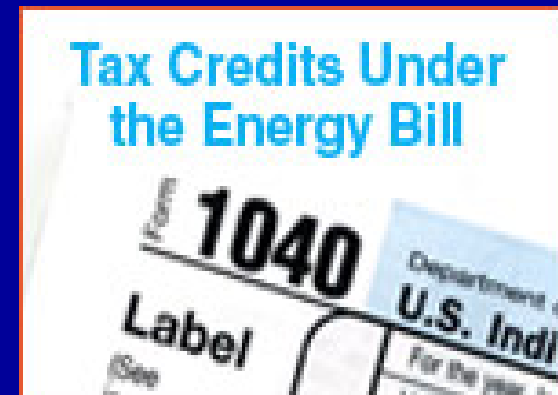
- 50% energy savings for heating and cooling over 2004 International Energy Conservation Code (IECC)
- At least 1/5 of savings from building envelope



Federal TAX Credits for Home Builders

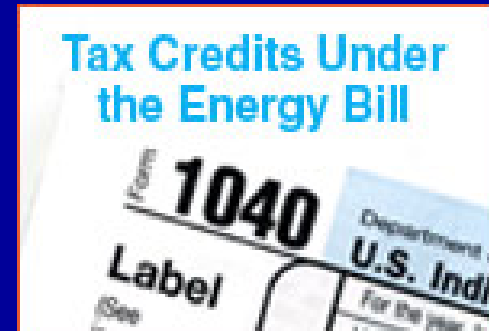
\$1,000 Tax Credit for New Manufactured Home

- 30% energy savings for heating and cooling over the 2004 IECC
- At least 1/3 of savings from building envelope



Federal TAX Credits for Home Builders

- Construction substantially completed after August 8, 2005
- Acquired from eligible contractor from January 2006 through December 2009



ENERGY STAR Partnerships

- ENERGY STAR partners
 - More than 8000 organizations
 - Private, public
 - Interested in investing in energy efficiency

- ENERGY STAR Provides
 - Tools and resources
 - Support energy efficiency decisions



ENERGY STAR Partnerships

WHY JOIN ENERGY STAR?

- **ENERGY STAR gives organizations power to reduce GHG emissions**
- **Partnering with ENERGY STAR demonstrates environmental leadership, improves energy efficiency, and saves money**



**BE A LEADER—CHANGE OUR
ENVIRONMENT FOR THE BETTER**

U.S. Environmental Protection Agency • U.S. Department of Energy

- **National and local recognition**

ENERGY STAR Partnerships

- Residential New Construction
 - Builders
 - Home Energy Raters
 - Architects/Home Plan
 - Designers
 - Utilities & other Sponsoring Programs
 - Lenders



Residential New Construction

HERS Rater Partnership Agreement

- Energy efficiency promoted to new homebuyer to protect environment, save \$\$ on energy
- Label at least one home per year
- Affix label to all homes independently verified to meet ENERGY STAR guidelines



ENERGY STAR Partnership

EPA Commitment to Rater Partner

- Provide partners w/ public recognition through locator tool, awards, media
- Respond to information, clarification request
- Provide current ENERGY STAR news
- Increase awareness of residential label and benefits of qualified home

Regional ENERGY STAR Activities



U.S. ENVIRONMENTAL PROTECTION AGENCY
Pacific Southwest
Region 9

Serving: Arizona • California • Hawaii • Nevada • Pacific Islands • over 140 Tribal Nations

- Recruit Partners
- Support ENERGY STAR for Residential Buildings
- ENERGY STAR Product Campaign

Regional ENERGY STAR Activities

Recruit Partners:



- Home Builders:
KB Homes, Excellence in Efficient Homes 2007, 2008
- HERS Raters:
CHEERS, Excellence in Efficient Homes, 2007
- Home Performance:
CA Building Performance Contractors Association
- Total in California for Above Categories: 262

Regional ENERGY STAR Activities

Support ENERGY STAR for Residential Buildings

- Move residential market to ENERGY STAR Homes
- Promote ENERGY STAR in affordable housing



Regional ENERGY STAR Activities: Support ENERGY STAR for Residential Buildings

Move residential market to ENERGY STAR Homes:

- National Association of Women in Construction, Chapter Meeting
- West Coast Green Building Conference
- Green Momentum Conference



Regional ENERGY STAR Activities: Support ENERGY STAR for Residential Buildings

Promote ENERGY STAR in affordable housing:

- HUD ONAP Greener Homes National Summit
- Torres/Martinez Trailer Park Project
- ENERGY STAR Residential Program – Habitat for Humanity



Regional ENERGY STAR Activities

ENERGY STAR Products Campaign

- **Local promotional efforts**
 - **Eco-City World Summit**



- **National efforts**
 - **Change – the – World pledge drive**
 1. **Change a light**
 2. **Choose ENERGY STAR Products**
 3. **Reset thermostat**

ENERGY STAR Recap

- Integral part of EPA's overall Climate Change Program effort to reduce GHG emissions
- Encourages the use of ENERGY STAR products and practices to address energy efficiency in homes, buildings & plants
- Tools & resources to support energy efficiency decisions
- Benefits include
 - Saving energy & costs
 - Protecting the environment
 - Demonstrating environmental leadership



ENERGY STAR Contact & Websites

Kathy Diehl – ENERGY STAR Program Manager

- diehl.kathy@epa.gov, 415 972-3996

- Websites:

 - www.epa.gov

 - www.energystar.gov

 - <http://www.epa.gov/climatechange/>

