

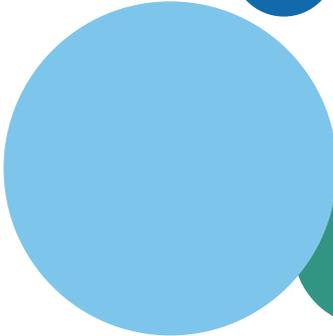
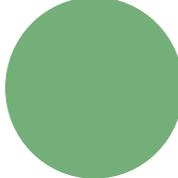


What is your



Home
**ENERGY
RATING**

know before you buy or sell

-  **Lower your energy bills**
-  **Enjoy a safer, more comfortable and durable home**
-  **Reduce your impact on the environment**
-  **Increase your home's sales appeal and appraisal value**

What
is your

Home
**ENERGY
RATING**

Whether you are buying or selling a residential property, or staying in your current home, every Californian should know his or her home **energy rating.**

Contents

Know the Facts	4
What Is a Home Energy Rating?	5
Understanding Your HERS Index	6
HERS Recommendations	7
Making Wise Improvements	8
Utility Bills and Ratings	9
Financing Your Improvements	10
Efficiency Adds Value	12
Go Solar California!	13

What is your Home ENERGY RATING

California is a national leader in promoting energy efficiency. As a result, our energy use per person has remained stable for over 30 years while the national average has steadily increased. Despite this success, we must continue to reduce energy use in our homes. The benefits are highly valuable – reducing energy use not only lowers your energy bills, but helps our electricity system remain reliable, even during high peak-load periods, while also protecting our environment.

In 2006, California established aggressive goals to reduce greenhouse gases that cause global warming. These goals will cut today's carbon emissions by 25 percent, so we can return to 1990 levels by the year 2020. Efforts to accomplish this goal represent important first steps in addressing the threat of global warming. We owe our children and grandchildren nothing less.

As you consider the sale or purchase of your home, this booklet asks that you recognize what energy efficiency measures have been built into the home, or ways to make further improvements to save energy and reduce peak electricity demand.

Your energy efficiency actions help make California a better, more environmentally sustainable place to raise your families.

Whether you are buying or selling a residential property, or staying in your current home, every Californian should know his or her home energy rating. Wasted energy wastes more than just your money – it changes our climate. The scientific community agrees that we must act now or risk facing an uncertain future.

The California Home Energy Rating System (HERS) Program provides a reliable way to estimate and compare the energy efficiency of California homes and identify wise energy saving

improvements. This booklet explains how the HERS program works and helps you find a qualified professional to rate your own home. Once you know your home energy rating, you will be able to choose smart energy upgrades and investments that will benefit your family now... and generations to come.

During a real estate transaction, a California HERS Rating is a great way to disclose facts about the energy efficiency of a home.

Know the **FACTS**

Whether you are getting ready to sell your home – or preparing to buy one – knowing the energy efficiency facts about the property is a major consideration. As buyers become more aware of the benefits of an energy-efficient home, homes with a favorable home energy rating may be more attractive to buyers.

Have you checked your ducts?

Heating and cooling ducts in an average California home leak almost 30 percent. That is why when heating or cooling equipment is replaced, testing the system's ducts for leaks is now required by building officials in many parts of the state.

If you are selling your home and had upgrades made without the required permits or duct testing, be sure to disclose this on your Real Estate Transfer Disclosure Statement. If you are preparing to buy a home that had duct work performed after October 2005, ask to see the duct testing report, or an explanation as to why such testing was not required.

For more information, visit:
www.energy.ca.gov/title24/changeout/

Selling?

A HERS rating will:

- Help determine facts about the energy efficiency of your home.
- Identify energy improvements that may make your home more attractive to buyers.
- Alert appraisers to add value for any energy improvements you may have made already.

Buying?

- Use a HERS rating to shop and compare the energy efficiency of homes you are considering.
- Learn about the most cost-effective options for lowering the energy bills in any home you are considering buying.
- Identify and qualify for energy efficiency financing.

Staying in your current home?

- Find out your HERS rating.
- Discover the best options for lowering your energy bills.
- Identify energy efficiency improvements that may also make your home more comfortable.
- Find resources to help finance your improvements.
- Improve your home's resale value.



You wouldn't buy a new car without knowing its "miles per gallon" rating. So why buy a home without a "home energy rating?"

What is a

HOME ENERGY RATING

A Whole-House Home Energy Rating is a comprehensive evaluation of the efficiency of the entire home. The homeowner receives a written report that includes a numeric score or "rating" of the home, plus recommendations for improvements that will reduce energy bills and make the home more comfortable. Knowing the energy rating of your home is similar to knowing the miles per gallon rating of your car.

The California Energy Commission has developed the California Home Energy Rating System (HERS) Program to cover almost every type of residence in California. This includes new and existing single-family homes and multifamily buildings of three stories or less. Energy Commission-approved HERS Providers train, certify, and oversee a new type of service professional known as a "California Whole-House Home Energy Rater."

Each California HERS Rater must follow standardized energy auditing procedures and use energy analysis software that meets the Energy Commission's technical requirements. The HERS Rater will inspect and assess all the major energy efficiency features of your home:

- Air leaks (sealed or unsealed)
- Cooling system
- Heating system
- Water heating system
- Heating and cooling ducts and/or pipes
- Insulation (attic, walls, floor)
- Windows
- Attached lighting fixtures
- Major appliances
- Solar electricity generating systems (if any)
- Other energy uses

Your HERS report will identify the most cost-effective and appropriate energy efficiency improvements for your home. Only a properly prepared HERS Report will receive an official California Home Energy Rating Certificate with the California Energy Commission's seal.

Rating costs vary depending on factors such as the size and features of your home and the extent of rater services needed. Ask your real estate agent for names of certified HERS Raters in your area or find an Energy Commission-approved HERS Provider at: www.energy.ca.gov/HERS/index.html or call the Energy Hotline at (800) 772-3300.

HERS Recommendations

Your HERS report will contain detailed recommendations so that you can learn about all the improvements that are cost-effective and appropriate for your particular home. Here are a few examples:

Test and seal air leaks in building envelope

A pressure test will show where the air is leaking out so you can make your home less drafty.



Increase attic insulation to R-38

Properly installed insulation makes your home quieter and more comfortable.



Test and seal air duct leaks

Almost every home in California has leaky ducts, typically wasting 30 percent or more.



Tune-up the heating and cooling system

Proper maintenance saves energy and improves comfort and safety.



Upgrade to a correctly sized ENERGY STAR® furnace

A new ENERGY STAR® furnace will run more quietly and keep you warm all winter for less money.



Hire a Professional

Don't trust just anyone to make your improvements. Trying to save a little can sometimes cost you more in the long run. Instead, find one or more licensed specialty contractors who have the knowledge, tools, and skills to do each job right. You may want to consider a "building performance" contractor who is a licensed general contractor and is specially trained and certified to help address all of the energy and comfort improvement opportunities in your home and make them work together as an efficient system. The Contractors State License Board website www.cslb.ca.gov provides more information on how to choose a qualified contractor.

Making WISE IMPROVEMENTS



Do it Yourself

Some improvements are so easy and inexpensive, you don't need a HERS rating to know they pay back quickly:

- Replace incandescent bulbs with ENERGY STAR® compact fluorescent lamps (CFLs).
- Replace all nightlights and holiday lights with light-emitting diodes (LEDs).
- Choose ENERGY STAR® appliances, computers, and televisions.
- Install low-flow showerheads and faucet aerators.
- Insulate the first 5 feet of pipes from the cold and hot water heater.
- Add or repair weather stripping on all doors and windows.
- Use caulk and spray foam to fill all visible air gaps.
- Clean or replace furnace air filters monthly.
- Plant shade trees.



Energy Wise HABITS

These no-cost tips will help reduce the energy consumption in your home:

- Turn off lights and computers when not in use.
- Use a power strip for televisions, DVD players, VCRs, and chargers, and turn off power to the strip when not in use.
- Recycle burned-out CFL bulbs, fluorescent tubes, televisions, computer monitors, and all other electronic waste.
- Unplug and recycle any inefficient old refrigerators and freezers.
- Use appliances efficiently. Use your dishwasher and clothes washer for full loads only. Use the cold water setting on your clothes washer when possible.
- Turn down the water heater to 120 degrees Fahrenheit.
- Use your drapes properly. In the summer, close your drapes during the day. In the winter, open your drapes during the day and close your drapes at night.
- Open your windows for natural ventilation on cool summer mornings and nights.

A \$100 per month reduction in your utility bills frees up enough cash to pay for a \$17,000 increase in your mortgage (assuming 6 percent interest over 30 years).

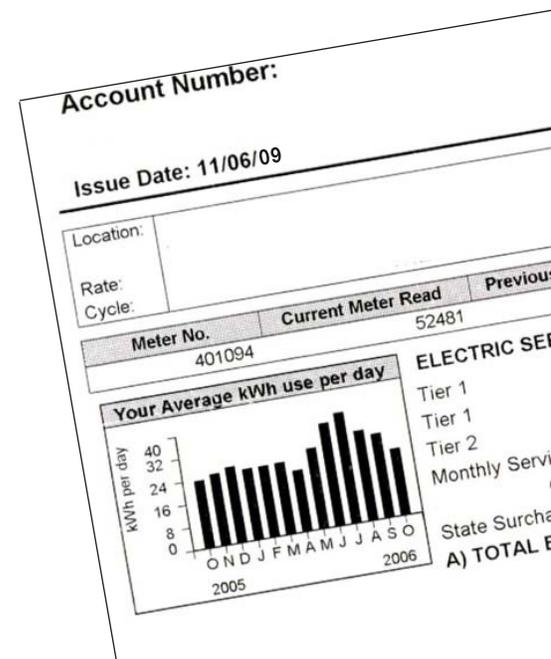
Utility Bills & RATINGS

Home energy efficiency ratings are designed to help you focus on the physical features of the house – not on other factors that can affect energy consumption like unusual weather or personal energy use habits.

Utility bills give a personal perspective: the history of how much energy the occupants of the home actually used over a period. Unless you consider a rating coupled with the utility bills, you may get only half of the story.

As a potential buyer, you should always ask to see the previous occupant's energy bills. While sellers are not obligated to share their utility bills, many will if asked.

If the old bills have not been saved, current occupants can access their records by calling the local utility or by setting up an account on the utility's website. Your HERS Rater can assist you in obtaining the bills and will consider them to establish a more complete picture of your home energy use to make the best recommendations for improvements. A Home Buyers' Energy Checklist that helps buyers ask questions related to the home's energy use is available at: www.energy.ca.gov/HERS/index.html.



Energy efficiency is different than energy consumption. Efficiency depends upon the physical features of the home and all the equipment it contains. Consumption is reduced through efficiency but also depends on the energy use behavior of the occupants. Wasteful habits, unusual weather, or malfunctioning equipment can drive up energy bills, even in the most energy-efficient house in the neighborhood.

After your mortgage payment, your energy bill is often the second largest monthly home ownership expense.



Financing your
IMPROVEMENTS

Principal
+ **I**nterest
+ **T**axes
+ **I**nsurance
+ **E**nergy

**True cost of owning
your home**

If you are buying or refinancing and looking for a way to finance your energy improvements, you should get advice from a knowledgeable real estate agent or lender about the many new options now available. The federal government, Fannie Mae/Freddie Mac, and many major lenders are introducing new products to help you fund your energy efficiency improvements. Some cities and counties also have programs that allow homeowners to finance efficiency improvements and solar installations over 20 years.

You may also be able to qualify for an Energy Efficient Mortgage (EEM). An EEM is a loan program that recognizes the importance of the energy efficiency of a home and allows for cost-effective energy upgrades to be financed in the mortgage. A HERS rating is required to qualify for an EEM. These loans provide borrowers the opportunity to make energy efficiency improvements to their homes and gain several desirable benefits including:

- Provide the ability to roll the cost of your efficiency improvements into a low mortgage rate.
- May stretch your debt-to-income qualifying ratio.
- Enjoy your improvements and energy savings right away.
- Earn a higher resale price when you sell.

Best of all, you get to enjoy all the benefits of your home improvements for the same total monthly cost (PITI+E)...or maybe even less.

EEM programs are available from:

- Federal Housing Authority (FHA)
- Veterans Administration (VA)
- Conventional lenders (Fannie Mae, Freddie Mac)
- Other home-buyer or refinancing programs

Combine an EEM with other programs and you may be able to borrow up to \$40,000 or more for efficiency improvements. Ask a knowledgeable lender if an EEM is right for you.

Another way to finance energy improvements is through an equity loan or equity line of credit. If your HERS rating is low enough, some lenders may offer a “green” mortgage or equity line of credit at a discount relative to their regular interest rates or points. Shop around to see if these products make sense for you. Utilities also offer financial incentives such as re-bates, for energy smart improvements, such as:

- Added insulation
- ENERGY STAR® appliances
- Refrigerator recycling
- High-efficiency heating and air conditioning systems
- Compact fluorescent light fixtures
- Whole-house fans, cool roofs, swimming pool pump motors, and more

Contact your local utility for information on their program offerings. Manufacturers also offer discounts or rebates on efficient products so check their websites or with a retailer for possible offers.





**Efficiency
ADDS VALUE**

It's no secret; energy efficiency features may make your home more valuable and sell faster.

Federal tax credits now available include:

10 percent of the cost, up to \$500 or a specific amount from \$50-\$300, through 2011 (existing homes only) for:

- Windows and Doors
- Biomass Stoves
- Insulation
- Roofs
- HVAC
- Water Heaters

30 percent of the cost, with no upper limit through 2016 (existing homes and new construction) for:

- Geothermal Heat Pumps
- Small Wind Turbines (Residential)
- Solar Energy Systems

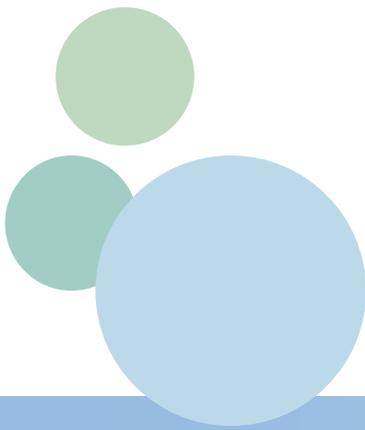
For more news on energy efficiency tax credits, visit: www.energystar.gov/taxcredits

Did You Know?

- A study of energy-efficient homes in The Appraisal Journal showed that a \$1 reduction in annual energy bills resulted in more than \$10 increase in resale value.
- A past president of the California Association of Real Estate Appraisers recommends that appraisals account for any efficiency improvements because they "so contribute to the habitability, enjoyability and economic stability of the home."
- FHA authorizes the cost of energy efficiency measures to be added to the mortgage.
- Home builders find that homes with efficiency and solar electricity upgrades sell faster and at higher prices than similar homes nearby.

Make sure your real estate agent knows about any efficiency improvements you have made, let buyers know your home is "Energy-Rated," and give the appraiser a copy of your HERS Report.

The energy used in the average home produces roughly twice as much greenhouse gas pollution as the average car (US EPA).



The California Energy Commission does not endorse any product, supplier, manufacturer, builder or organization.

The text in this booklet is designed to be informational and not all-inclusive.



CALIFORNIA
ENERGY COMMISSION

ACKNOWLEDGEMENTS

ADVISORY COMMITTEE

Arlene Baxter	REALTOR®, Berkeley, CA
Mike Bachand	CalCERTS, Inc.
Elizabeth Gavric	California Association of REALTORS®, Government Affairs
Greg Harding	Office of Real Estate Appraisers
Shery Hoellwarth	ConSol, Inc.
Paula B. Howell	Energy Documentation Services
William Jansen	Broker Risk Management
Jana Maddux	CHEERS®
Scott Muldavin	Green Building Finance Consortium; The Mauldavin Company
William Neece	Green Key Real Estate
Chris Neri	California Department of Real Estate
William Poulton	California Real Estate Inspection Association
Randal Riedel	California Building Performance Contractors Association
Charles Segerstrom	Pacific Gas & Electric Company
Bernie Stephan	Broker, Marin County

PROJECT CONSULTANTS

Tom Conlon	GeoPraxis, Inc.
Charles Eley	Architectural Energy Corporation
Margaret Kapranos	REALTOR®, Greenbrae, CA
Dan Suyeyasu	Architectural Energy Corporation
Andrew Waegel	GeoPraxis, Inc.

ADDITIONAL CONTRIBUTORS

Rashid Mir	California Energy Commission
Betty LaFranchi	California Energy Commission
Vanessa Byrd	California Energy Commission
Bruce Maeda	California Energy Commission
Beverly Duffy	California Energy Commission
Parker Scott	California Energy Commission
Lance DeLaura	SEMPRA

Governor

Jerry Brown

Chairman

Robert Weisenmiller, Ph.D.

Vice Chairman

James D. Boyd

Commissioners

Karen Douglas

Carla Peterman

Anthony Eggert

Executive Director

Robert Oglesby

Deputy Director

Efficiency and Renewable

Energy Division

Panama Bartholomy

Office Manager

High Performance Buildings and

Standards Development

Bill Pennington

Project Manager

Helen Lam

California Energy Commission

1516 Ninth Street, MS-37

Sacramento, CA 95814-5512

**Need Help? Call the Energy Hotline
(800) 772-3300 or (916) 654-5106**

CEC-400-2009-008-BR-REV1

June 2011

Prepared by:

Architectural Energy Corporation

San Francisco, California

Contract No. 400-05-020

Photo on page 4 courtesy of The Energy Conservatory.

Photos on page 7 courtesy of: National Renewable Energy Laboratory, CertainTeed, and Carrier.

Property Address:

I have received a copy of the **WHAT IS YOUR HOME ENERGY RATING?** booklet (CEC-400-2009-008-BR-REV1)

Buyer's Signature Printed Name Date

Buyer's Signature Printed Name Date

Buyer's Agent Signature Printed Name Date

Broker's Name

Seller's Signature Printed Name Date

Seller's Signature Printed Name Date

Listing Agent's Signature Printed Name Date

Broker's Name

ALL SIGNERS SHOULD RETAIN A COPY OF THIS PAGE FOR THEIR RECORDS



California Civil Code Section 2079.10 states that if this booklet is provided to the buyer by the seller or broker, then this booklet is deemed to be adequate to inform the home buyer about the existence of California Home Energy Rating Program.

For more information, visit: www.energy.ca.gov/HERS/index.html