

# Home Energy Score

## Home Energy Score in the Bay Area Assessor Orientation

Thursday, August 27, 2015

U.S. DEPARTMENT OF ENERGY  
**Home Energy Score**



# Agenda

- Welcome & Introductions
- Home Energy Score Overview
- The Home Energy Score Report
- Assessor Eligibility & Requirements
- Training & Assessor Support
- Quality Assurance & Program Mentoring
- Rebate Information
- Q&A

# A “MPG” for Homes

The U.S. Department of Energy created the Home Energy Score to serve as a nationally standardized “miles-per-gallon” rating for homes

- Offers homeowners **affordable, reliable, easy way** to understand homes’ energy performance
- Available at **no-cost** to program providers
- **Motivates homeowners** to invest in residential energy efficiency
  - Simple and action-oriented
  - Ability to document investment in energy efficiency using the post-improvement score
  - Allows comparison between homes regardless of location

**Home Energy Score website:** [www.homeenergyscore.gov](http://www.homeenergyscore.gov)

# Home Energy Score Basics

- Who typically provides it?
  - StopWaste is the Partner in the San Francisco Bay Area
  - Qualified Assessor working under a Home Energy Score Partner
- What does a homeowner get?
  - Home Energy Score Report
    - Asset Score between 1 and 10
    - Home Facts: List of data collected and energy use calculations
    - Recommendations for improvements for now or later

# Home Energy Score Report

## Home Energy Score

### Score

Address: **12345 Honeysuckle Lane  
Smithville AR 72466**

### Home Facts

Home size: **1,800 square feet**  
Year built: **1970**  
Air conditioned: **Yes**

### Recommendations

Your home's  
current score **3**

Score with  
improvements **7**

Estimated  
annual savings **\$411**

Uses  
more  
energy

1

2

3

4

5

6

7

8

9

10

Uses  
less  
energy



[homeenergyscore.gov](http://homeenergyscore.gov)

The **Home Energy Score** is a national rating system developed by the U.S. Department of Energy. The **Score** reflects the energy efficiency of a home based on the home's structure and heating, cooling, and hot water systems. The **Home Facts** provide details about the current structure and systems. **Recommendations** show how to improve the energy efficiency of the home to achieve a higher score and save money.

Assessment type: **Official Score**

Assessment date: **Feb 03, 2014**

Score ID: **42944**

Qualified assessor #: **101019**

Home Energy Score Version: **v2014.4506**

- Takes an hour or less to complete
- Can be generated by home inspectors, contractors, utilities, raters, and others
- This free on-line tool can be used directly or linked to other software tools
- No reporting requirements, all automated

# 40 Data Points Collected

- No specialized equipment needed (blower door, infrared camera, etc.)
- Significant overlap with a Home Inspection Report
- Low-cost service
  - Less than 15 minutes if done as part of a home energy audit
  - Less than 1 hour if done as a stand-alone assessment
- Ongoing analysis and a continuous improvement process by DOE/NREL

## Assessment Checklist

### General Info:

- Year
- # of bedrooms
- Blower door test?
- Professionally air sealed?
- Window specs?

### Outside

- House Orientation
- # of stories
- Roof: Predominant exterior finish
  - Color
- Walls: Same type on all sides?
  - Construction type
  - Exterior finish
- Windows: Same on all sides?
  - Panes
  - Frame
  - Glazing

### Inside

- Attic
  - Roof Construction
  - Insulation type & amount
  - Air sealed?
  - Air handler present? Type and year
  - Ducts?: Insulated? Sealed?

- Upper Floor
  - Square feet
  - Ceiling Height
  - Skylights?
  - Windows
- Main Floor
  - Square feet
  - Ceiling Height
  - Skylights?
  - Windows
  - Walls & insulation
- Crawlspace - insulation type & amount
  - Ducts?: Insulated? Sealed?
- Basement – Conditioned?
  - Square feet
  - Ceiling Height
  - Windows
  - Walls & insulation
- HVAC Equipment
  - Type?
  - Year or SN?
- Water Heater
  - Type?
  - Year or SN?

Notes:

# Benefits & Opportunities

## Qualified Assessors will receive:

- Free training, before and after joining the program
- Access to Home Energy Score materials/guidelines from DOE
- Rebates for each Assessment, while funds last
- Subsidized Mentoring and Quality Assurance

# Assessor Eligibility & Requirements

	Qualification Requirements
<b>Eligibility and Credentialing Pre-Requisites</b>	<p>Candidate must work under StopWaste, an official DOE Partner</p> <ul style="list-style-type: none"><li>– Work in one of the nine Bay Area counties</li><li>– Possess all required insurance</li><li>– Hold a current DOE recognized credential</li></ul>
<b>Practical Test</b>	<p>Candidate uses the Home Energy Score 3D Simulation Tool to retrieve home characteristic data and to score</p> <ul style="list-style-type: none"><li>– Three “Practice/Challenge” Homes (80 or better)</li><li>– Two Test Homes (90 or better)</li></ul>
<b>Written Exam</b>	<p>Score of 80 or better on multiple choice test that includes 20 questions regarding the Home Energy Score program only</p>
<b>Quality Assurance</b>	<p>5% of homes must be rescored under a DOE approved quality assurance plan</p>
<b>Mentoring</b>	<p>First home scored with a mentor; counts toward quality assurance requirement</p> <ul style="list-style-type: none"><li>– Mentoring will be performed by either a QA appointee OR another experienced Qualified Assessor</li></ul>



# Steps to Becoming a Qualified Assessor

1. Participate in an Assessor Orientation Webinar
2. Complete the StopWaste Home Energy Score Assessor Participation Agreement
  - Demonstrate minimum building-related credentials
  - Let us know if you work in the City of Berkeley\*
3. Gain access to the FREE 3D Sim tool
4. Complete the two-part 3D Sim training & testing
5. Conduct your first Home Energy Score Assessment with a Mentor

\*The City of Berkeley has additional training and requirements for Assessors

# DOE Recognized Credentials

Assessors must hold a relevant credential from one of the residential trade organizations listed below.

Organization	Minimum Accepted Credential
American Society of Home Inspectors (ASHI)	ASHI Inspector or Certified Inspector
Build it Green	Green Point Rater or Certified Green Building Professional
Building Performance Institute (BPI)	Building Science Principles Certificate of Knowledge
California Real Estate Inspector Association	CREIA Certified or Master Inspector
International Association of Certified Home Inspectors (InterNACHI)	Home Energy Inspector
National Association of Home Inspectors (NAHI)	Certified Real Estate Inspector
National Association of the Remodeling Industry (NARI)	Green Certified Professional, Certified Remodeler, or Master Certified Remodeler
North American Technician Excellence (NATE)	Air Conditioning/Heat Pumps, Gas/Oil Heating, or Gas/Oil Hydronics
Residential Energy Services Network (RESNET)	HERS Rater

# Online Training & Testing Details

## PRACTICE MODE:

Score > 80% on 3 Challenge Homes



## EXAM PART I:

Score > 90% on 2 Test Homes



## EXAM PART II:

Score >80% on 20-Question Multiple Choice

DOE will provide you with access to the FREE training & testing

- An Assessor candidate can take training and testing at their convenience
- No proctor or registration is required to take the test
- Unlimited access to the 3D Sim tool training scenarios

# Online Training & Testing Details

## Overview of the 3D Sim:

- Use Firefox or Safari browsers
- Read the Sim Instructions document and have it open when you log-in for the first time
- Make sure you read the instructions carefully before jumping into any of the Sim homes
- Takes about 10-15 hours to complete training and testing

### Introduction and Tutorial

Welcome to the Home Energy Score Training Simulation.

To run the sim, click the url to download the Unity Plugin: <http://unity3d.com/webplayer/>

Video 1 Intro  
3 minutes



User Guide (PDF)



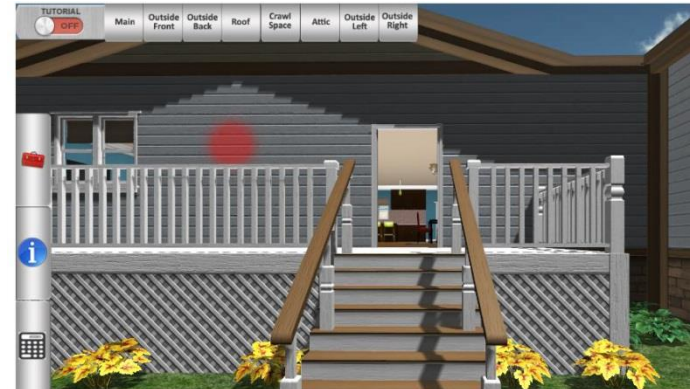
**House #1:** Simple single story ranch house with a vented crawl space.

**House #2:** 2 story single family home with 1 high ceiling and a basement.

**House #3:** End unit 2 story town home on a slab with skylights and vaulted ceiling.



COMMENTS HVAC A+ Instructor Students Help



# Quality Assurance & Program Mentoring

- Once the 3-D Sim testing is complete:
  - You become a Qualified Home Energy Score Assessor
  - BKi will confirm an Assessors' participation status by email
  - BKi will schedule an orientation call to review the next steps for completing your first Assessment
- For your first Assessment:
  - BKi will arrange for a Mentor to attend your first Assessment
  - Mentor will provide feedback on data collection and data entry
- BKi will arrange to shadow you at 1 in 20 Assessments

# BayREN Home Energy Score Rebates

Rebates are available for a limited time, on a first-come, first-served basis

- Assessors may be eligible to receive \$300 for their first Assessment, and \$150 for each subsequent Assessment
  - Not available in the City of Berkeley, because they have their own rebates available
- Assessors need to complete a Rebate Application and a W-9

# Berkeley Home Energy Score Rebates

- Berkeley Home Energy Score Rebate Program in support of the Building Energy Saving Ordinance (BESO) offers up to \$200 for homeowners
- More information and steps to participate:
  - Visit <http://www.cityofberkeley.info/BESOassessor/>
  - Contact [homeenergyscore@energycenter.org](mailto:homeenergyscore@energycenter.org)
  - Or we can put you in touch with program administrators



# Q&A

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