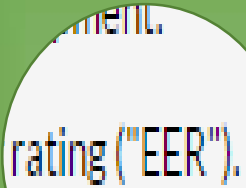


Residential Energy Labeling The View from Oregon





rating ("EER").

History of Oregon Home Energy Scores



Rise of the In-Market Products



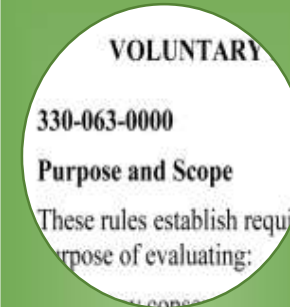
Your home's current score 3

USDOE & National Tools



Required Training
Select all that apply (minimum)
 Building Performance BPI ID#
 Building Performance BPI ID#

Licensed Assessors



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330-063-0000
Purpose and Scope
These rules establish requirements for the purpose of evaluating:

Rules for Scoring Systems



Approve Systems and Reports



Category	Usage	Cost
Electricity	4,832	\$ 507
Natural Gas	727	\$ 858

Deploy Standard Product



History of Oregon Home Energy Scores

1977

Energy Efficiency Rating System (EER) for single family residences adopted into administrative rule for Building Codes. To encourage voluntary energy conservation and the voluntary use of a rating in real estate transactions.

2005

Energy Rated Homes of Oregon services established in Housing and Community Services Department. Homeowners, buyers, builders or others can request a Home Energy Rating. A Rater assigns a rating between 1 and 100. This is translated to 1 to 5 –Star rating. Report recommendations for improvements and return on investment is provided.

rating ("EER").

History of Oregon Home Energy Scores

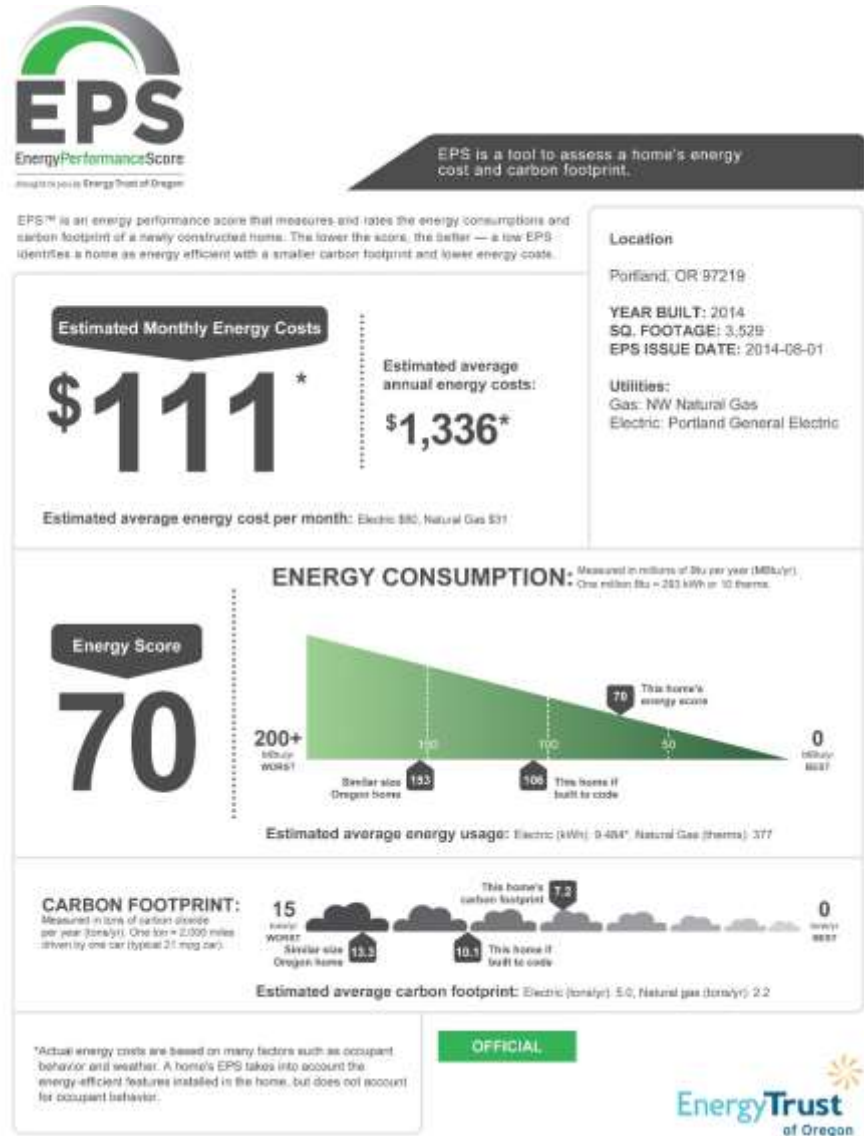
2009

Department of Energy facilitates a task force selected by the Governor to research scoring systems and create administrative rules for a mandatory or voluntary scoring method. Task force chose voluntary, and required USDOE approved software. 60,000 homes sold in Oregon in 2009.

2013

Legislation directs Construction Contractors Board to create licensing for Energy Assessors. Directs Appraiser Board to educate appraisers to consider energy efficiency improvements. Directs Department of Energy to adopt by rule a home energy performance score system. ODOE creates a stakeholder panel after rulemaking allowed in-market systems to operate through 2015 while under review.

Rise of the In-Market Products



Energy Trust of Oregon Energy Performance Score

In 2009, Energy Trust of Oregon develops the Energy Performance Score. Initially for new homes, expands to existing homes market. The Regional Multiple Listing Service (RMLS) implements fields for green ratings and scores. Energy Trust, through independent verifiers and contractors, has delivered more than 10,000 Energy Performance Scores to customers of Oregon's investor-owned utilities.



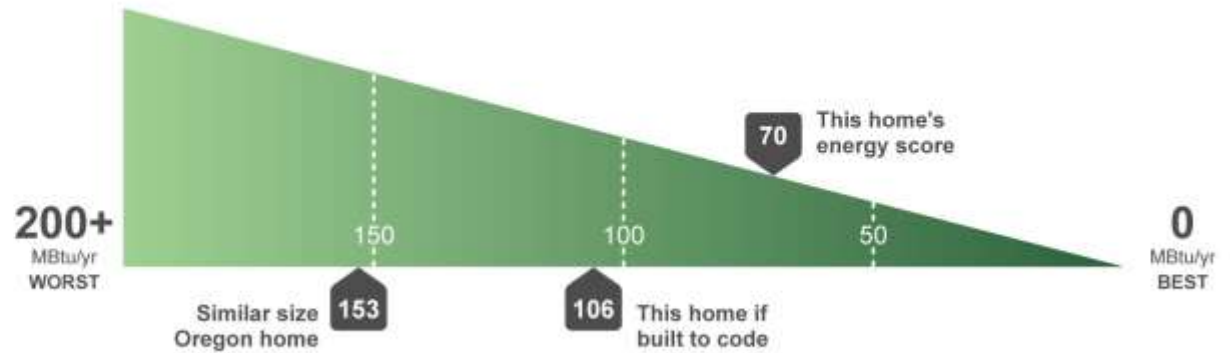
Rise of
the In-
Market
Products

Energy Trust of Oregon Energy Performance Score

EPS is a consumption-based score that calculates annual site energy use in MBTU, adjusted for fuel parity, so electric heat homes with equal shell efficiency do not score better than homes served by natural gas.

Energy Score
70

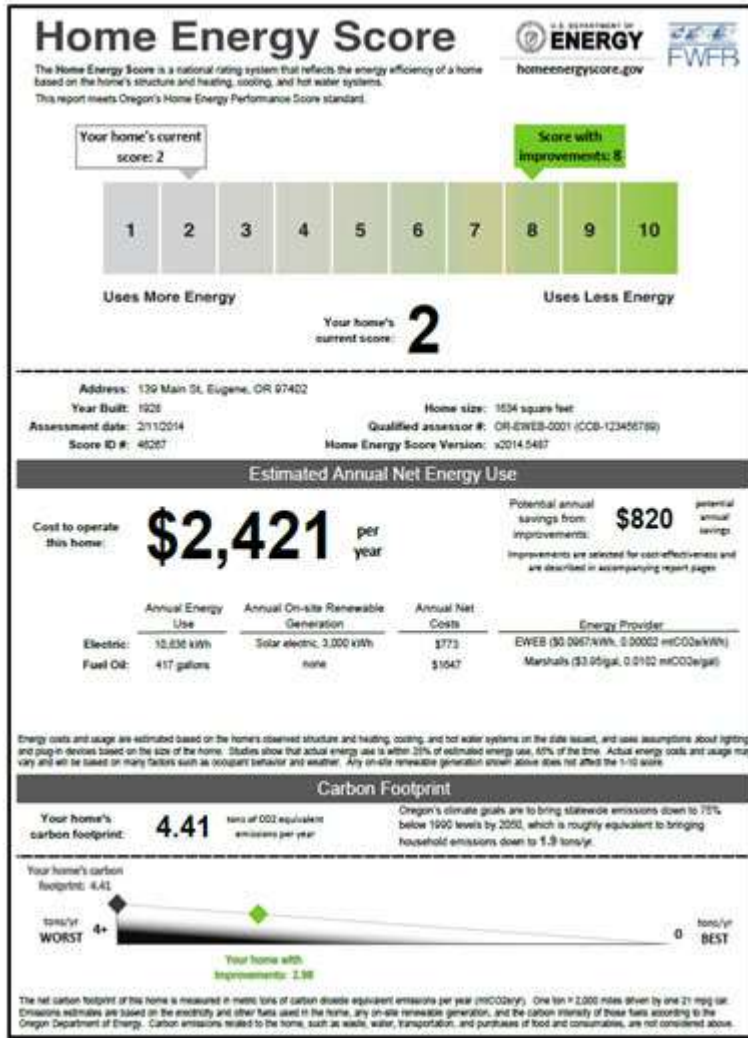
ENERGY CONSUMPTION: Measured in millions of Btu per year (MBtu/yr).
One million Btu = 293 kWh or 10 therms.



Estimated average energy usage: Electric (kWh): 9,484*, Natural Gas (therms): 377



USDOE & National tools



USDOE Home Energy Score

Public utility Eugene Water and Electric Board (EWEB) pioneers the USDOE Home Energy Score.

EWEB localizes score data for energy prices, carbon dioxide content of electricity.

Oregon has 37 public utilities.

Your home's current score **3**

USDOE & National tools

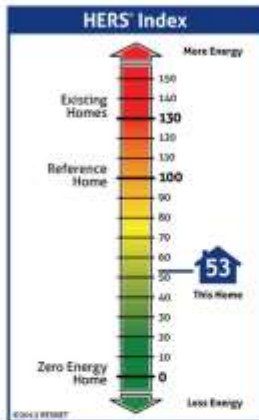


Oregon Home Energy Performance Score System Report

Property
Address
City, State, Zip Code

Rating Company
Name of Company
Phone Number
Name of HERS Rater

HERS Information
Confirmed Rating
Registry Rating Number
HERS Rater RTIN Number
Date of Rating



The HERS Index is a whole house energy analysis conducted by a certified RESNET HERS Rater in compliance with the RESNET Mortgage Industry National Home Energy Rating Standards, and calculated in compliance with the RESNET/International Code Council/ANSI Standard 301-2015.

The Reference Home refers to a home designed to be in compliance with the 2006 International Energy Conservation Code.

Estimated Annual Energy Consumption

Electricity (kWh)
Natural Gas (CCF)
Heating Oil (gal)

Estimated Annual Energy Costs

Electricity (\$)
Natural Gas (\$)
Heating Oil (\$)

Estimated Annual Energy Offset by Renewable Energy Sources

Solar Space Heating	Solar Water Heating
Electricity (kWh)	Electricity (kWh)
Natural Gas (CCF)	Natural Gas (CCF)
Heating Oil (gal)	Heating Oil (gal)
Photovoltaics	Wind
Electricity (kWh)	Electricity (kWh)
Natural Gas (CCF)	Natural Gas (CCF)
Heating Oil (gal)	Heating Oil (gal)
Hydroelectric	
Electricity (kWh)	
Natural Gas (CCF)	
Heating Oil (gal)	

Retail Energy Prices Used to Determine Energy Costs

Electricity (\$)
Natural Gas (\$)
Heating Oil (\$)

Emissions Data

Carbon Dioxide (CO2) - tons/year
Sulfur Dioxide (SO2) - tons/year
Nitrogen Dioxide (NOx) - tons/year

This report meets Oregon's Home Energy Performance Score standard.

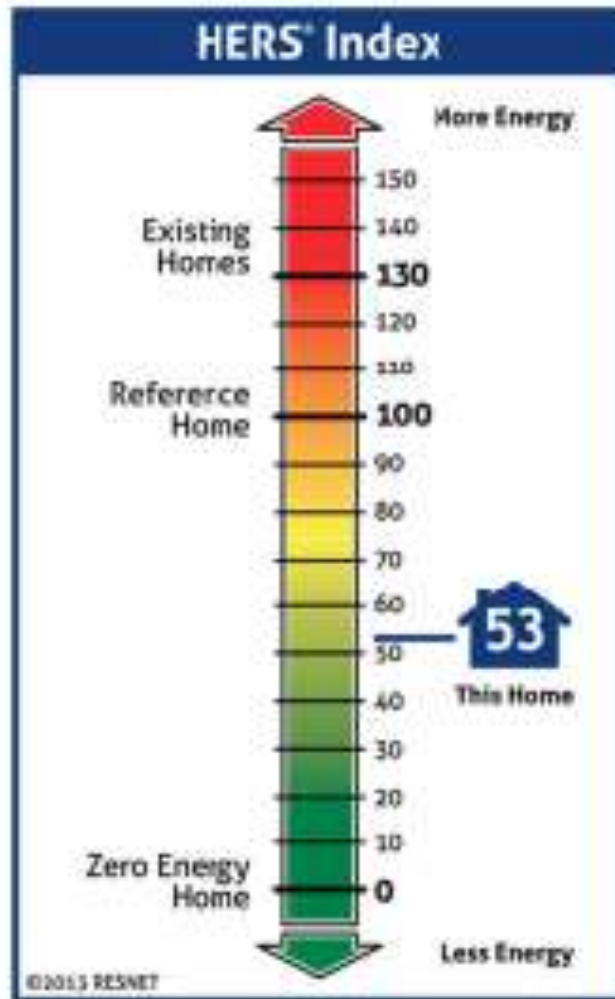
RESNET Home Energy Rating System

Home Energy Rating System (HERS) Ratings have not been used in Oregon to qualify new homes for ENERGY STAR and other programs. Customers seeking Energy Efficient Mortgages can seek a HERS Rating, and many of the verifiers for the EPS are also HERS raters.



Your home's
current score **3**

USDOE &
National
tools



HERS is an indexed score relating to a code baseline.

Required Training
 Select all that apply (minimum)

Building Performance
 BPI ID# _____

Building Performance
 BPI ID# _____

Licensed Assessors

Individuals issuing energy scores must obtain a Home Energy Assessor certification. Many assessors are affiliated with contractors who already have Oregon contractor licensing; the assessor endorsement is low-cost (\$100 annually).

Assessors must prove training via HERS, USDOE Home Energy Score, Oregon Weatherization or approved alternate. Assessors must also complete the specialized training in the system they use for issuing scores.

330-063-0025
Training Requirements for Home Energy Assessors
 Individuals producing home energy performance scores must:

- (1) Be certified as a home energy assessor by the Oregon Construction Contractors Board if required by ORS 701.529;
- (2) Have completed training in the software program used to produce the score; and
- (3) Have successfully completed one of the following training and certification programs:
 - (a) Training and certification as a Building Performance Institute Building Analyst or Home Energy Professional Energy Auditor;
 - (b) Training and certification from the Residential Energy Services Network as a Home Energy Rater;
 - (c) Training and certification from the Oregon Training Institute as a Residential Energy Analyst; or
 - (d) Other training and certification program or work experience approved by the department. Requests for such approval must be submitted to the department in writing. The department may request information about the training and certification program or work experience from the requestor and will provide an approval decision to the

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Purpose and Scope

These rules establish requirements for the purpose of evaluating:

Rules for Scoring systems

Administrative rules specify that an approved system produce a report:

- (a) The home energy performance score described in section (2) and an explanation of the score;
- (b) An estimate of the total annual energy used in the home in retail units of energy, by fuel type;
- (c) An estimate of the total annual energy generated by on-site solar electric, wind electric, hydroelectric, and solar water heating systems in retail units of energy, by type of fuel displaced by the generation;
- (d) An estimate of the total monthly or annual cost of energy purchased for use in the home in dollars, by fuel type, based on the current average annual retail energy price of the utility serving the home at the time of the report;

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330-063-0000

Purpose and Scope

These rules establish requirements for the purpose of evaluating:

Rules for Scoring systems

Administrative rules specify that an approved system produce a report:

(e) The current average annual utility retail energy price in dollars, by fuel type, used to determine the costs described in subsection (d) of this section;

(f) At least one comparison home energy performance score that provides context for the range of possible scores. Examples of comparison homes include, but are not limited to, a similar home with Oregon's average energy consumption, the same home built to Oregon energy code, and the same home with certain energy efficiency upgrades.

(g) The name of the entity that assigned the home energy performance score and Construction Contractors Board license number.

(h) The date the building energy assessment was performed



Approve
Systems
and
Reports

Three Systems Approved

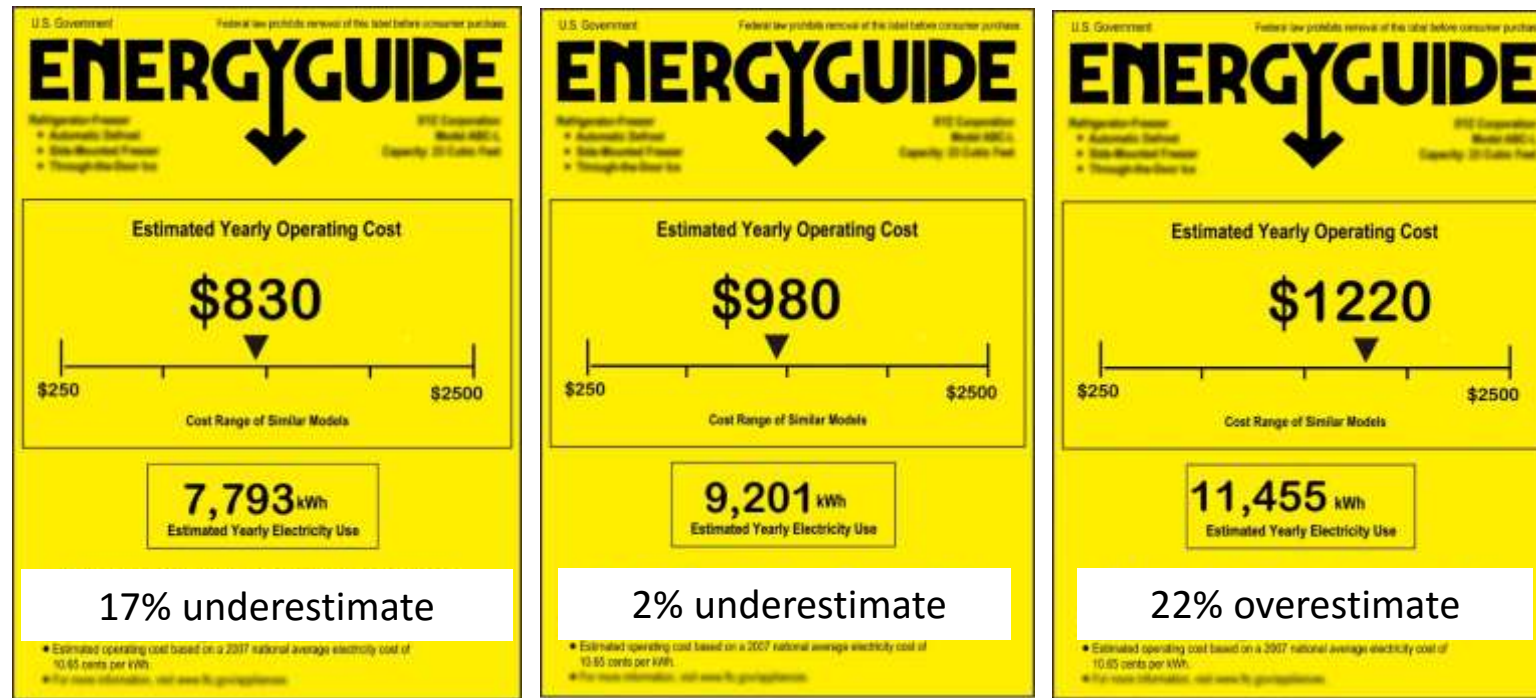
Oregon approved the three in-market systems for scoring homes, pending review by the stakeholder panel. Systems submitted reports to meet the requirements, modified their products to meet rule and were approved to continue to operate in Oregon.

Except: Systems were asked by ODOE to establish a method where the basic data on the scoresheet is consistent across all systems.



Approve systems and reports

The three systems use three different software products. Based on testing data provided by applicants, the potential error band between systems could produce different metrics.





Deploy consistent product

“Nutrition Label”

The stakeholder panel is considering one software (USDOE Home Energy Score) behind the scenes to create a generic label that can be used with all scoring systems.

Oregon Home Energy Performance Score

Address **1555 5th St NE Salem**

Year Built **1922** Conditioned Square Feet **2797**

Uses more energy | 1 | 2 | 3 | 4 | **5** | 6 | 7 | 8 | 9 | 10 | Uses Less Energy

Estimated Annual Energy Use

Electricity	kilowatt-hours	4,832	\$ 507
Natural Gas	therms	727	\$ 858

Other

Electricity Provider	PGE	cost per kWh	\$0.105
Natural Gas Provider	NW Natural	cost per Therm	\$1.180

Assessor Name **Terry Verde**



Assessor CCB# **331859**

Assesment Date **1/26/2015**

Qualified Assessor # **OR-0001** Score ID **424**

On-site energy production: solar, wind or hydroelectric, solar water heating kilowatt-hours equivalent **0**
therms equivalent **0**

*This report meets Oregon's Home Energy Performance Score Standard
OAR 330-063-0020*





The nutrition label concept allows in-market systems to:

- Use their own market-facing product
- Display consistent information across platforms
- Customize price and carbon dioxide metrics to local
- Including USDOE HES metric allows FHA consideration
- RMLS can now post any of three scores, but in future may choose one score plus program information



Warren Cook
Oregon Department of Energy
warren.cook@state.or.us

<http://www.oregon.gov/energy/RESIDENTIAL/Pages/Home-Energy-Assessor-Certification.aspx>

<https://olis.leg.state.or.us/liz/2013R1/Downloads/MeasureDocument/HB2801>

http://www.oregon.gov/ENERGY/docs/reports/legislature/2011/oregon_taskforce_on_energy_performance_scores_2010.pdf