Residential Energy Labeling
The View from Oregon
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.
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.
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.
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.
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.
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.
HERS is an indexed score relating to a code baseline.
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
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;
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
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.
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.

- 22% overestimate
- 2% underestimate
- 17% underestimate

Actual energy bill: $1,000
“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.
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

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