



# City of Portland Home Energy Score



Wendy Koelfgen  
Bureau of Planning and Sustainability



# As of January 1, 2018...

## Information disclosed

- Home energy report and Home Energy Score

## Regulated party

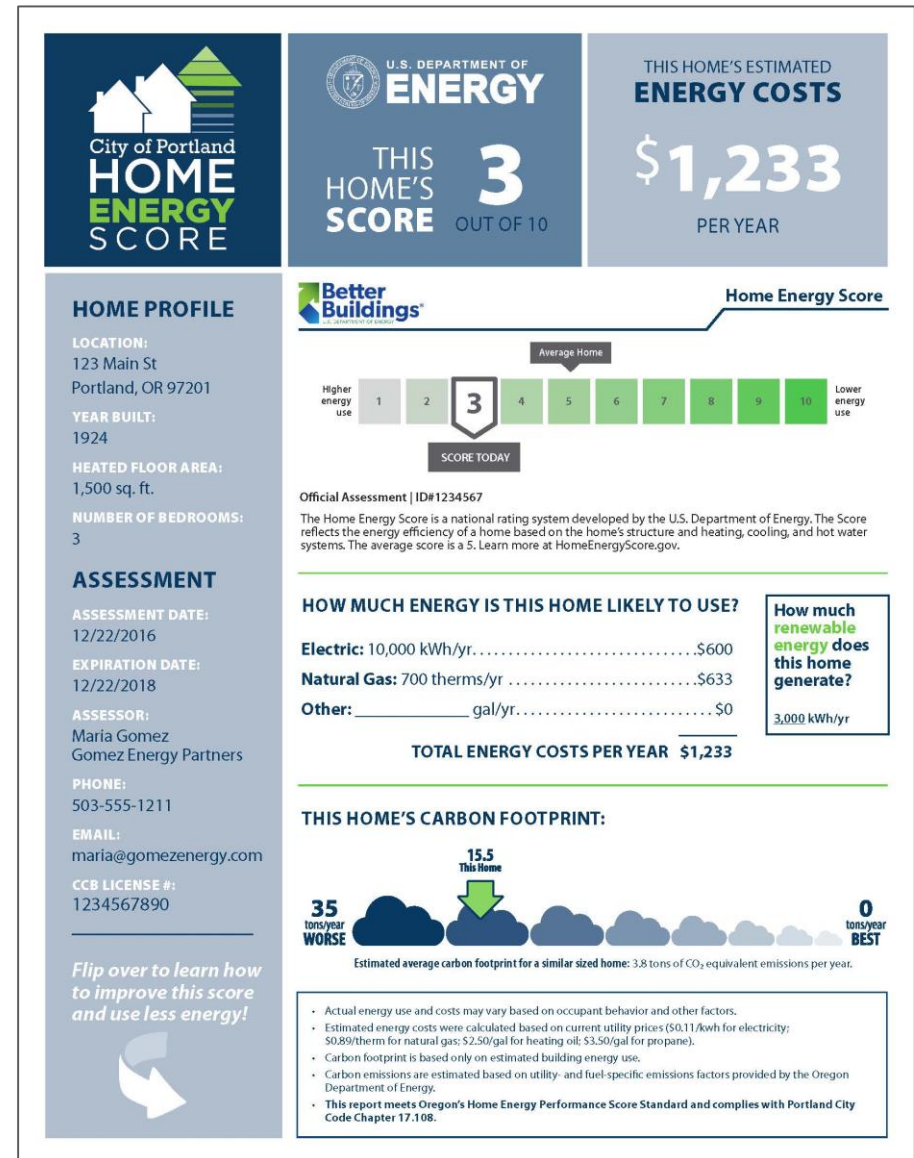
- Seller or homebuilder

## Time of disclosure

- At or before listing

## Recipient of disclosure

- Real-estate listings, prospective buyers at open house





## Including a Home Energy Score in a Home Sale is:

Fast.  
Simple.  
Credible.  
Useful.





# Why a Home Energy Score?

A home energy score at the time of listing will help homebuyers, sellers and owners have access to home energy use info that is credible and easy to understand.

Allows new home buyers to have insight into the full costs of owning a home and potentially qualify for additional loan products.

Supports City of Portland's Climate Action Plan to help reduce carbon emissions.



# A Home Energy Score Helps Homebuyers & Sellers

Like a miles-per-gallon rating for homes



**Third-party Verified &  
Affordable**



**Single Family or  
Townhome**



**Inform and Showcase  
Improvements**

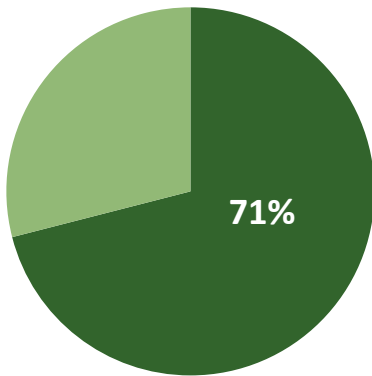


**Info on Energy Use for  
Buyers**

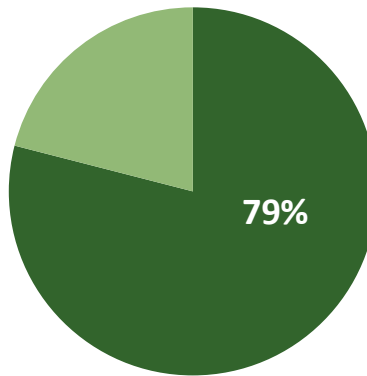
# National Association of REALTORS®

## Sustainability Report 2017

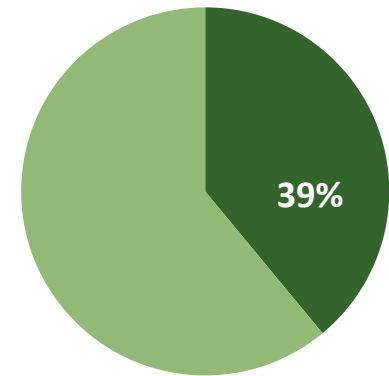
**Energy efficiency  
promotion in listings is  
valuable to clients**



**Utility bill costs are  
important to clients**



**Realtors not comfortable  
explaining home  
performance**



# An "Asset" Based Report

## Based on assets of the home:

Home construction type, insulation levels.

Heating, cooling, and hot water systems

Average number of people living in the home

Average occupant behavior and energy use



## Not based on:

Current homeowner's behavior,  
number of occupants or energy use





# Program Entity Roles



US Department of Energy (US DOE)  
**Manages the Home Energy Score**  
rating protocol, training requirements and  
quality assurance guidelines.



Oregon Department of Energy (ODOE)  
Manages compliance to Oregon-specific  
Home Energy Score requirements –  
Training credentials, CCB licensing, scorecard utility rates.



City of Portland,  
Bureau of Planning & Sustainability  
Manages the City of Portland Home Energy Score program and is the official Home Energy Score Partner to  
US DOE.

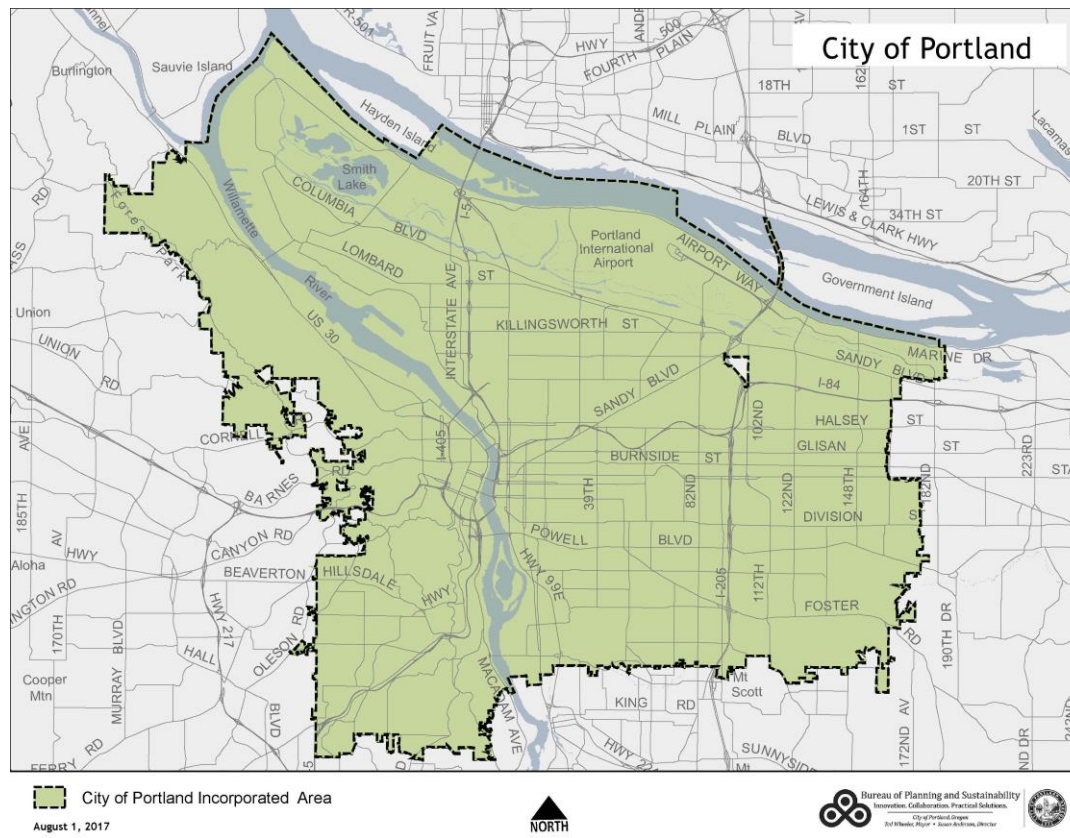


Earth Advantage  
Implements Home Energy Score program  
quality assurance on behalf of City of Portland.



# Portland City Limits

The ordinance applies to most\* single-family homes or townhomes sold within Portland city limits.



# Portland City Limits

To confirm, search [www.portlandmaps.com](http://www.portlandmaps.com) using the site address and confirm the jurisdiction.

Example of City of Portland qualifying home:

The screenshot displays the Portland Maps website interface. The map shows a street grid with SE Sherman St and SE 32nd Ave. A property is highlighted with a red box. The property details are listed on the right side of the screen.

**Portland Maps** Places Account Support Advanced ▾

Search: Enter an address...

**SE SHERMAN ST**  
PORTLAND, OR 97214

**PROPERTY**

Year Built	1913
Description	SINGLE FAMILY RESIDENTIAL
Bathrooms	ONE FULL BATH ONE HALF BATH
Building Area	1,826 sq ft
Neighborhood	RICHMOND
<b>Jurisdiction</b>	Portland / Multnomah
Zoning	R5 - Residential 5,000
Elevation	145 ft (approximate)
Owner	
Owner Address	PORTLAND, OR 97214

Assessor

Permits & Zoning

Parks

Schools

# Portland City Limits

To confirm, search [www.portlandmaps.com](http://www.portlandmaps.com) using the site address and confirm the jurisdiction.

Example of a non-qualifying home:

**Portland Maps** Places Account Support Advanced ▾

Search ▾ Enter an address...

**NW CORNELL RD**  
PORTLAND, OR 97210

**PROPERTY**

Note: This property is not within the City of Portland or its service districts. The data below may not be complete. Please refer to your jurisdiction for more information.

Year Built	1936
Description	SINGLE FAMILY RESIDENTIAL
Bathrooms	TWO FULL BATHS
Building Area	1,516 sq ft
Neighborhood	FOREST PARK
Jurisdiction	Unincorporated / Multnomah
Elevation	624 ft (approximate)
Owner	
Owner Address	3711 NW CORNELL RD PORTLAND, OR 97210-1083
Related Accounts	<input type="text"/>

Assessor

Permits & Zoning

Parks



# Homes That Are Required to Get a Score

Single Family Home




Side-by-Side Townhome




Stacked Units /Condos



# Home Energy Report



City of Portland  
**HOME ENERGY SCORE**



U.S. DEPARTMENT OF  
**ENERGY**

THIS HOME'S  
**SCORE** **4**  
OUT OF 10

THIS HOME'S ESTIMATED  
**ENERGY COSTS**  
**\$1,507**  
PER YEAR

**HOME PROFILE**

LOCATION:  
1234 SE 123rd Ave  
Portland, OR 97206

YEAR BUILT:  
1939

HEATED FLOOR AREA:  
1,439 sq.ft.

NUMBER OF BEDROOMS:  
3

**ASSESSMENT**

ASSESSMENT DATE:  
02/28/2018

SCORE EXPIRATION DATE:  
02/28/2026


ASSESSOR:  
John Smith  
Energy Score Assessor.com

PHONE:  
503-123-4567

EMAIL:  
John@  
EnergyScoreAssessor.com

CCB LICENSE #:  
123456

*Flip over to learn how to improve this score and use less energy!*



**Better Buildings**  
An EPA and DOE program

**Home Energy Score**

Higher energy use 1 2 3 **4** 5 6 7 8 9 10 Lower energy use

SCORE TODAY

Official Assessment | ID# 193810

The Home Energy Score is a national rating system developed by the U.S. Department of Energy. The Score reflects the average energy efficiency of a home based upon the home's structure and heating, cooling, and hot water systems. The average score is a 5. Learn more at [HomeEnergyScore.gov](http://HomeEnergyScore.gov).

**HOW MUCH ENERGY IS THIS HOME LIKELY TO USE?**

Electric: 6,153 kWh/yr..... \$701

Natural Gas: 739 therms/yr..... \$806

Other: \_\_\_\_\_ gal/yr..... \$0

**TOTAL ENERGY COSTS PER YEAR \$1,507**

**THIS HOME'S CARBON FOOTPRINT:**

15 tons/year WORSE 6.5 This Home 0 tons/year BEST

What should my home's carbon footprint be? Between now and 2030, Portlanders should reduce carbon pollution per household to 3 metric tons per year to reach our climate goals.

- Actual energy use and costs may vary based on occupant behavior and other factors.
- Estimated energy costs were calculated based on current utility prices (\$0.11/kwh for electricity; \$1.09/therm for natural gas; \$2.58/gal for heating oil; \$2.21/gal for propane).
- Carbon footprint is based only on estimated home energy use. Carbon emissions are estimated based on utility and fuel-specific emissions factors provided by the OR Department of Energy.
- Relisting 2-7 years after the assessment date requires a free reprint of the Report from [www.greenbuildingregistry.com/portland](http://www.greenbuildingregistry.com/portland) to update energy and carbon information.
- This report meets Oregon's Home Energy Performance Score Standard and complies with Portland City Code Chapter 17.108.

Score today: **4**

Score with improvements:\* **7**

Estimated energy savings with improvements: **\$273** PER YEAR

Estimated carbon reduction with improvements: **20%** PER YEAR

**TACKLE ENERGY WASTE TODAY!**

Enjoy the rewards of a comfortable, energy efficient home that saves you money.

- ☒ Get your home energy assessment. Done!
- ☐ Choose energy improvements from the list of recommendations below.  
Need help deciding what to do first? Non-profit Enhabit offers free 15-minute phone consults with expert home advisors. Call 855-870-0049.
- ☐ Select a contractor (or two, for comparison) and obtain bids.  
Checkout [www.energytrust.org/findacontractor](http://www.energytrust.org/findacontractor) or call toll free 1-866-368-7878.
- ☐ Explore financing options at [www.enhabit.org](http://www.enhabit.org) or [www.energytrust.org](http://www.energytrust.org).

**\* PRACTICAL ENERGY IMPROVEMENTS | COMPLETE NOW OR LATER**

To achieve the "score with improvements," all recommended improvements listed below must be completed. Improvements all have a simple payback of ten years or less and may be eligible for mortgage financing. For a more detailed explanation of costs and payback, please get a bid from a contractor.

FEATURE	TODAY'S CONDITION	RECOMMENDED IMPROVEMENTS
Cathedral Ceiling/Roof	Roof insulated to R-11	Insulate cathedral ceiling/roof to R-30 or maximum possible
Duct insulation	Un-insulated	Insulate to R-8
Duct sealing	Un-sealed	Reduce leakage to a maximum of 10% of total airflow
Envelope/Air sealing	Not professionally air sealed	Professionally air seal
Heating equipment	Natural gas furnace 80% AFUE	Upgrade to ENERGY STAR
Water Heater	Standard natural gas tank	Upgrade to ENERGY STAR, minimum 0.67 EF (Energy Factor)
Air Conditioner	None	
Attic insulation	Ceiling insulated to R-30	
Basement wall insulation	None	
Floor insulation	Insulated to R-0	
Foundation wall insulation	None	
Skylights	None	
Wall insulation	Insulated to R-3	
Windows	Double-pane, low-E glass	
Solar PV	None	

Visit [www.energytrust.org/solar](http://www.energytrust.org/solar) to learn more. (Note: Solar PV is not included in "Score with Improvements")

**YOU CAN DO IT YOURSELF!**

Looking for low-cost ways to cut energy waste, boost your comfort and lower your energy bills? Visit the resources below to learn about easy changes you can make today:  
[www.energytrust.org/tips](http://www.energytrust.org/tips) and [www.communityenergyproject.org/services](http://www.communityenergyproject.org/services)

# Exemptions

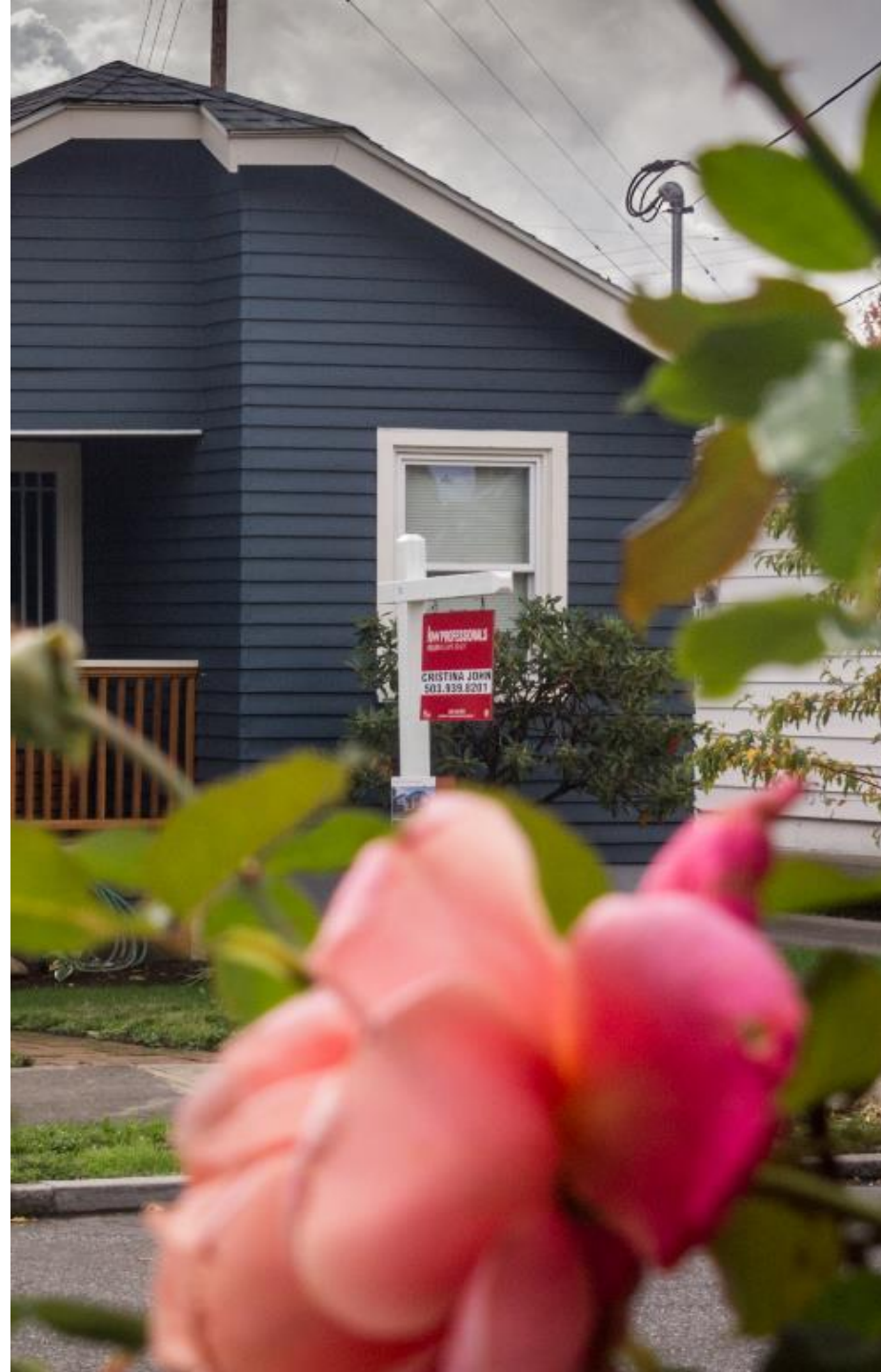
- Foreclosure sales
- Trustees sales
- Deed-in-lieu of foreclosure
- Short sales
- Qualifies for sale at public auction
- In receivership
- Subject to notice of default
- Uninhabitable due to casualty or condemned
- Undue hardship





# Income-Qualified Sellers

The City has funding for calendar year 2018 to fund the cost of Home Energy Assessments for sellers whose income is at or below 60 percent of median family income.



## Pre-Construction Score for Code Built Homes

*Does a home listed for sale before or during construction need a Home Energy Score?*

Yes, unless the builder or home earns an EPS waiver by participating in the Energy Trust new homes program.



- Home Energy Assessors can provide builders with a "pre-construction" Home Energy Score.
- This is done by the Assessor using information provided by the builder and from plans.
- The "pre-construction" Home Energy Score fulfills the city mandate. No additional score is needed after construction.

## Two Ways to Obtain an EPS Waiver

**OPTION 1:** Verifiers obtain waivers on behalf of their builders.

- Verifiers email affidavit to Energy Trust of Oregon.
- Either for 100% of homes or for a list of homes receiving an EPS.



**OPTION 2:** Builders obtain their own waivers with the City.

1. Contact Energy Trust to request proof of EPS participation.
2. Complete online City of Portland Waiver Application at [www.pdxhes.com](http://www.pdxhes.com) at least ten days before listing, and attach EPS confirmation letter.



# FAQs

- Shelf life?
  - 8 years for onsite assessment.
  - 2 years for energy rates and carbon factors.
- How long will it take to complete a Home Energy Assessment?
  - 45 minutes – 1 hour in the home.
  - 1-1 ½ hours including data entry.
- What's the cost?
  - Market-driven, expected range \$150-250.



# Quality Assurance

- ✓ In field QA
- ✓ Desk review QA
- ✓ Data validation implemented in March 2018

## **Top Data Validation Fails:**

1. The roof area is too small compared to foundation areas
2. Water heater efficiency out of range

# Green Building Registry™



## Search for City of Portland Home Energy Reports

Enter A City of Portland Street Address & Zip Code

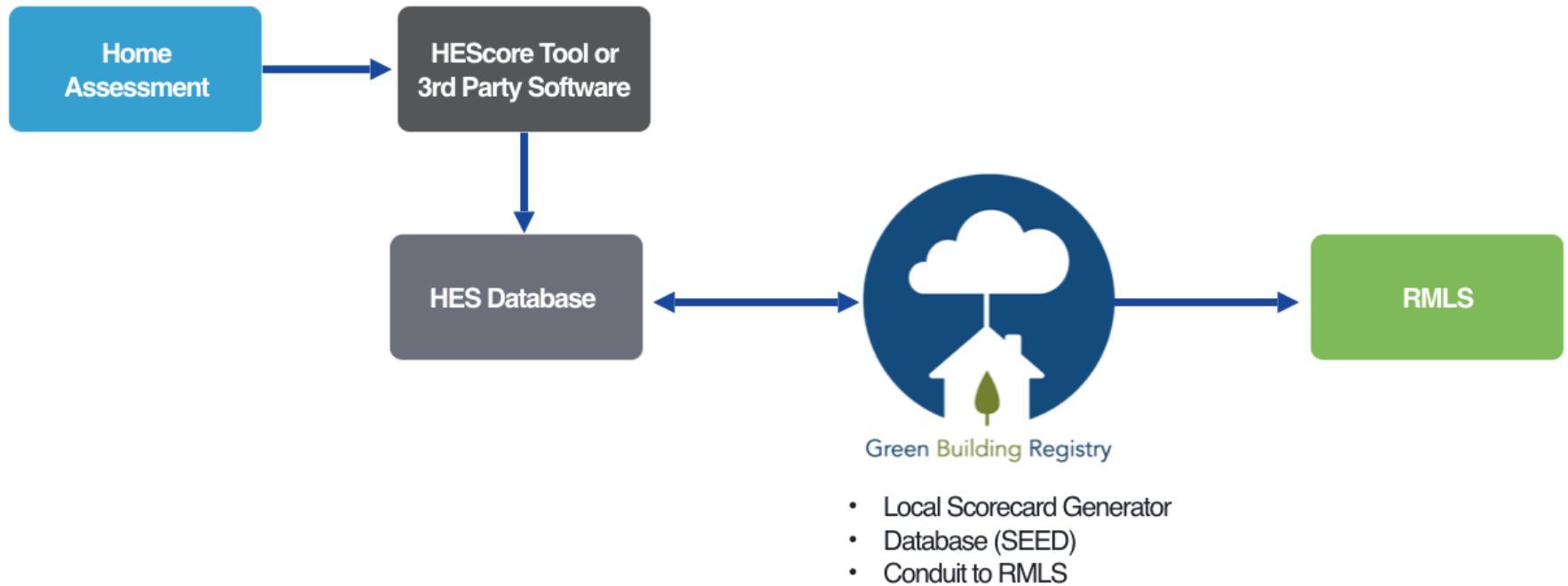
OR

Make sure you include the whole street address (SW, NW, CT, ST, etc.)

SEARCH

[About](#)

# Green Building Registry™ Data Flow in Portland





# Green Building Registry User Experience

PORTLAND  
HOME  
ENERGY  
SCORE

Latest data record for this home

5808 SW KRUSE RIDGE DR PORTLAND, OR | PROPERTY ID: R199895

Latest Home Assessment: 2018-03-06

8

This home's energy score

Green Building Verification

Type: Home Energy Score

Green Verification Body: US DOE

Green Verification Year: 2018


Green Verification Version: v2017.0d3573cc

Green Verification Metric: 8

Green Verification Status: OFFICIAL

Green Verification Source: City of Portland, OR

Green Verification URL: <https://api.greenbuildingregistry.com/report/pdf/R199895.pdf>



Click the image to download the home energy report or copy the link above

This home does not have a green certification.

CLOSE RECORD

Powered by Green Building Registry™ / a product of Earth Advantage

# Portland Auto-Populating RMLS

Listing Load: New Listing - Step 2 [? Help](#)

New Listing

Fields Filled: 14%      MLS#: 17278049    Area: 142    Property Category: Residential

Form    Form Alerts

**Listing Information**

**General Information**

**Residence**

**Remarks**

**Approximate Room Sizes and Descriptions**

**Features**

**Utilities**

**Financials**

**Broker/Agent Information**

**Amenities**

**Additional Structures**

**Water Rights**

**Green/Energy**

**Contract**

**Green/Energy Supplement Form** include ☒

Green Verification Type

[Load From Green Building Registry](#)

Auto-populate Home Energy Score (HES) and report URL

Type 1:

Type 2:

Reach Code:

Solar Panel:

**Energy Efficiency Features:** Max Choices: 6

<input type="checkbox"/> Added Wall Insulation	<input type="checkbox"/> Car Charging Station	<input type="checkbox"/> Car Charging Station Ready
<input type="checkbox"/> EnergyStar Air Condng	<input type="checkbox"/> EnergyStar Appliances	<input type="checkbox"/> FOR-95+
<input type="checkbox"/> Forced Air - 90%	<input type="checkbox"/> Geothermal	<input type="checkbox"/> Heat Exchanger
<input type="checkbox"/> Heat Pump	<input type="checkbox"/> Insulation and Ceiling Insulation	<input type="checkbox"/> Mini Split
<input type="checkbox"/> Partial Ceiling Insulation	<input type="checkbox"/> Partial Wall Insulation	<input type="checkbox"/> Passive Solar
<input type="checkbox"/> Solar	<input type="checkbox"/> Solar Hot water	<input type="checkbox"/> Solar Off Grid
<input type="checkbox"/> Solar Photovoltaic	<input type="checkbox"/> Solar Radiant	<input type="checkbox"/> Solar Ready
<input type="checkbox"/> Tankless	<input type="checkbox"/> Vinyl Window-Double Paned	<input type="checkbox"/> Vinyl Window-Triple Paned
<input type="checkbox"/> Wood Window-Double Paned	<input type="checkbox"/> Wood Window-Triple Paned	<input type="checkbox"/> Zonal

Green/Energy Public Remarks:

(Max 250 chars)

Public remarks intended for public viewing. Confidential information should be excluded. **No personal promotion or broker/owner contact information allowed in this section.** No links or websites allowed in the Public Remarks.

[« Previous Tab](#)    [Next Tab »](#)

# Q1 Program Stats

(as of 4/8/18)

- # of authorized Home Energy Assessors: 124
- # homes scored: 2708
- Unique homes scored in past week: 231
- Sample Compliance: 56%
- Compliance after enforcement: 80%





# Q1 Program Stats

(as of 4/8/18)

Score today: <b>3</b>	Score with improvements:* <b>7</b>	Estimated energy savings with improvements: <b>\$500</b>	Estimated carbon reduction with improvements: <b>27%</b>
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## TACKLE ENERGY WASTE TODAY!

Enjoy the rewards of a comfortable, energy efficient home that saves you money.

- ☒ Get your home energy assessment. Done!
- ☐ Choose energy improvements from the list of recommendations below.  
Need help deciding what to do first? Non-profit Enhabit offers free 15-minute phone consults with expert home advisors. Call 855-870-0049.
- ☐ Select a contractor (or two, for comparison) and obtain bids.  
Checkout [www.energytrust.org/findacontractor](http://www.energytrust.org/findacontractor) or call toll free 1-866-368-7878.
- ☐ Explore financing options at [www.enhabit.org](http://www.enhabit.org) or [www.energytrust.org](http://www.energytrust.org).

## \* PRACTICAL ENERGY IMPROVEMENTS | COMPLETE NOW OR LATER

To achieve the "score with improvements," all recommended improvements listed below must be completed. Improvements all have a simple payback of ten years or less and may be eligible for mortgage financing. For a more detailed explanation of costs and payback, please get a bid from a contractor.

FEATURE	TODAY'S CONDITION	RECOMMENDED IMPROVEMENTS
Basement wall insulation	No insulation	Insulate to R15
Attic insulation	No insulation	Insulate to R49
Foundation wall insulation	No insulation	Insulate to R11
Wall insulation	No insulation	Insulate to R15
Envelope/Air Sealing	Not professionally air sealed	Seal the gaps and cracks that leak air into your home
Duct insulation	R3	Insulate to R6
Duct sealing	45% leakage	Reduce leakage to 10% of total airflow
Floor insulation	R5	Insulate to R38
Gas furnace	78% AFUE	Upgrade to ENERGY STAR 95% AFUE
Skylights	Single-paned	Replace with ENERGY STAR (double-pane solar-control low-E argon gas wood frame)
Water heater	Standard electric tank	Upgrade to ENERGY STAR (heat pump, EF 2.76)
Windows	Single-paned aluminum	Replace with ENERGY STAR (double-pane solar-control low-E argon gas wood frame)

## YOU CAN DO IT YOURSELF!

Looking for low-cost ways to cut energy waste, boost your comfort and lower your energy bills? Visit the resources below to learn about easy changes you can make today:


[www.energytrust.org/tips](http://www.energytrust.org/tips) and [www.communityenergyproject.org/services](http://www.communityenergyproject.org/services)

- Average Base Score: 4.4
- Average Upgrade Score: 7.1
- Average HES change: 3 points
- Average \$ savings: \$306
- Average kWh savings: 1609
- Average therm savings: 113




What support is available  
to homeowners to  
improve their Home Energy Score?


[CONTACT US](#) [ABOUT](#) [FIND A CONTRACTOR](#)

[RESIDENTIAL](#) [COMMERCIAL](#) [INDUSTRY + AGRICULTURE](#) [RENEWABLE ENERGY](#)

Residential > Home Upgrades and Cash Incentives



## Home Upgrades + Cash Incentives



### PROMOTION

#### How Efficient Is Your Home?

Is your home wasting energy and costing you money? Complete our free Home Energy Review to find out.

[Start Your Review](#)

Making energy-efficient upgrades to your home is a great way to improve comfort and save money and energy. Energy Trust provides cash incentives to help make your energy-saving upgrades more affordable. Many upgrades are also eligible for state and federal tax credits.

Choose a home energy solution below, or [download our full list of incentives](#) for Oregon homeowners.



## Homestyle Energy Mortgage Loans

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- Allows you to finance up to 15% of “as completed” home value for energy improvements.
- Home energy score is required.

### **Example:**

1. Home has been appraised for \$300,000 by lender.
2. Energy efficiency improvements and/or solar install expected to add another \$20,000 in home value.
3. Buyer can finance up to an additional \$48,000 to do improvements ( $\$320,000 \times 15\%$ ) and wrap into mortgage.



## FHA Loans

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- FHA borrowers can borrow more when they buy an energy efficient home. Lenders can provide a 2% stretch on debt-to-income ratios on purchase or refinance loans
- Homes that Score 6 or higher on the home energy score
- Or borrow can demonstrate that they are taking action to improve the home score to 6 or higher.



# www.pdxhes.com



SELLERS / BUYERS / REAL ESTATE PROFESSIONALS / BUILDERS

## WHAT'S THE SCORE?

BEGINNING ON JANUARY 1, 2018,  
sellers of single-family homes in Portland, Oregon are  
required to obtain and disclose a Home Energy Report  
estimating the energy-related use, associated costs, and  
cost-effective solutions to improve the home's efficiency.



City of Portland, Bureau of Planning and Sustainability

✉ [hesinfo@portlandoregon.gov](mailto:hesinfo@portlandoregon.gov)

☎ 503-823-5771

Home Energy Assessors

Resources

About

Blog

FAQ

# Next Steps

- Administrative rule changes later this year
- Initial stage of scoping program to drive upgrades
- Consistency across listing services
- Enforcement Automation
- Increase outreach, focused on Realtors and LEP communities
- Develop remote test out procedures.



# Thank you!

## Any questions?

**Program Website:**

[www.pdxhes.com](http://www.pdxhes.com)

**Email:**

[HESinfo@portlandoregon.gov](mailto:HESinfo@portlandoregon.gov)

503.823.5771