"From Listing to Closing: The Role of HERS in the Real Estate Transaction Process"

February 26, 2019

10:30 am to 12:00 pm

Bayside B



From Listing to Closing: The Role of HERS In the Real Estate Transaction Process.

Tuesday, February 26, 2019 - 10:30 AM-12:00 PM, Bayside B

Presenters: Ryan Meres Sandra Adomatis

This session will walk attendees through the real estate transaction process from listing to closing and illustrate the key steps impacted by the HERS Index Score. Attendees will also hear about what RESNET is doing to drive HERS Index scores into the real estate transaction, including the newly launched API for MLS data aggregators and the Appraiser Portal. Builders, raters and real estate professionals will walk away from this session with a clear understanding of how the HERS Index fits into the real estate transaction and how they can work in their local market to drive change.

Today's Speakers



Ryan Meres, Program Director, RESNET

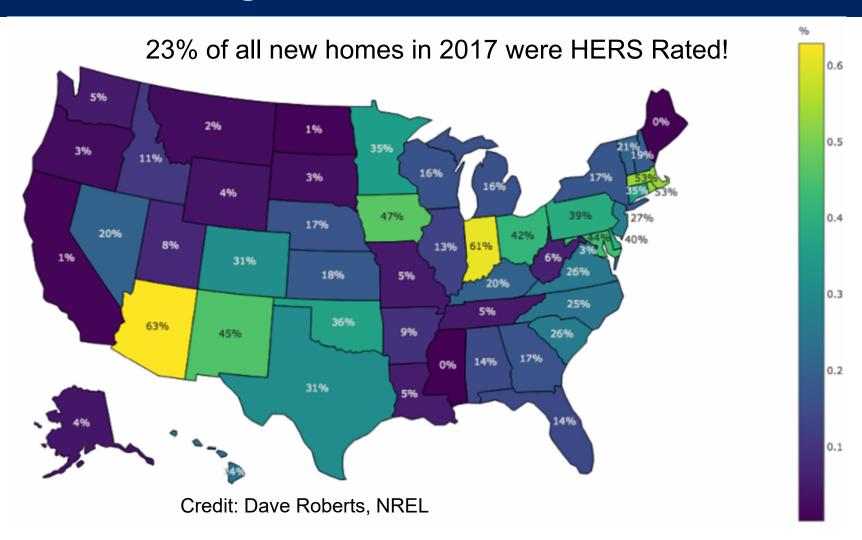


Sandy Adomatis, SRA, LEED Green Associate, NAR
Green Designee
CEO - Adomatis Appraisal Services

Popularity of HERS



Percentage of New Homes HERS Rated



Zillow Housing Trends Survey-2017

Wants and Needs



71% Neighborhood Safety



67% Initial Price Range



62% # of Bedrooms



62% Air Conditioning



53% # of Bathrooms



48% Preferred Kitchen Style

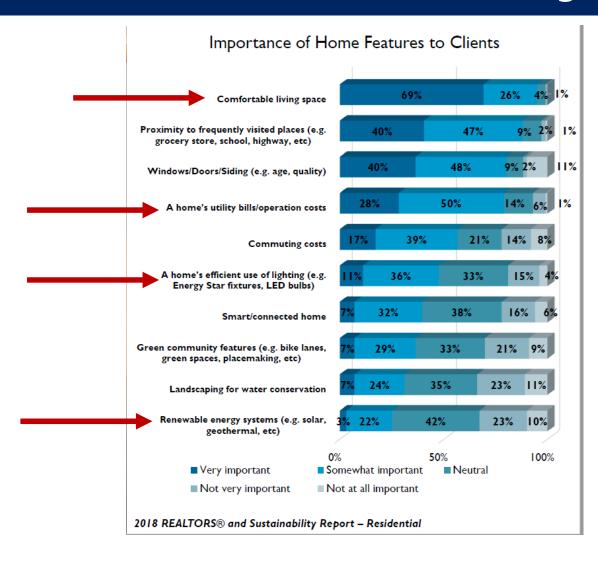


48% Energy Efficiency



47% Preferred Finishes

What Consumers are Wanting



Energy Scores in Real Estate Listings





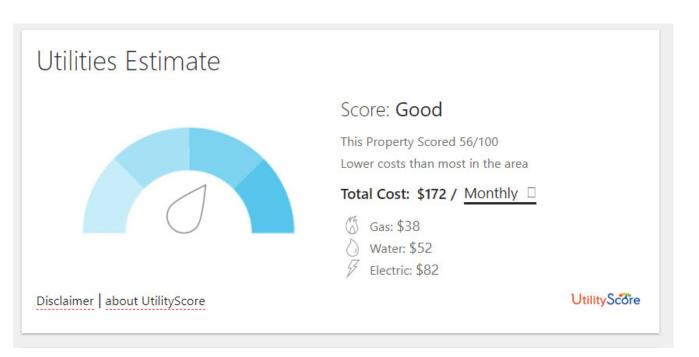
<u>realestate.com</u> is working with <u>UtilityScore</u> to provide a score and estimated energy costs for homes listed on its site.

<u>Redfin</u> is working with <u>Tendril</u> to provide an Energy Score for all homes on its platform, not just those listed for sale.

Up to 110 million homes are now covered on these two platforms.

Automated Energy Models: Not Third Party Verified!

Energy Scores in Real Estate Listings



Estimate accounts for:

- Home size,
- Home age,
- Heating type,
- Cooling type,
- Local climate,
- Other home characteristics (if known), including: renewable energy, insulation levels, pool or spa

HERS Data in the Real Estate Transaction



Estate

Real

Need access to data to include in the listing

 Market a home's EE and green features



Lenders/Underwriters

 Need data to support potentially higher loan value



Appraisers

- Need data to identify comparables and justify value.
- Need more data in the MLS to more easily compare EE features

Getting HERS Data into Real Estate Listings

HERS Data API-progress

API= Application Programming Interface

Summer-2018: API Fields Finalized for compatibility with RESO

Fall-2018: API development completed

Winter-2018: API testing completed

January-2019: few programming tweaks to improve speed of API

SOON: full roll-out to data providers

HERS Data API Fields

Auto-populate HERS Index scores into real estate listings!

RESO fields and corresponding RESNET Registry fields:

Green Verification Type: (HERS Rating)

Green Verification Year: (Date of Rating)

Green Verification Metric: (HERS Index Score)

Green Verification Status: (Confirmed/Sampled/Threshold Rating)

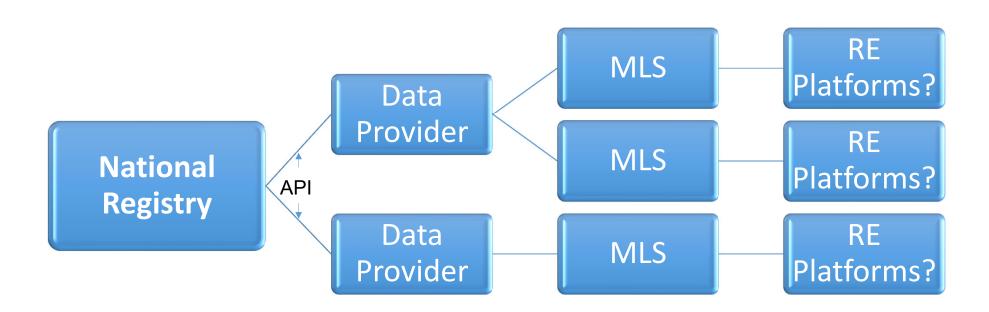
Green Verification Source: (RESNET Registry)

Green Verification URL: (Direct link to the home's rating info on RESNET's

Public Access to the Registry: http://www.resnet.us/public-access-to-resnet-

national-registry).

Getting HERS Data to MLS and RE Platforms



Zillow Listing Provided by MLS

Similar Homes for Sale





See all similar listings

Listing Provided by

Wendy Nicholson, Curasi Realty Inc., (845) 457-9174, Source: Hudson Gateway MLS



Report problem with listing

Getting HERS Scores into MLSs

GOAL: Auto-populate HERS Index

Scores in MLSs

MLS Needs to Have Green Fields and Want HERS Scores Work Through
MLS's Data
Provider or a
Third Party
Provider

Get Data
Sharing
Agreements in
Place

Connect
RESNET
Registry with
the Data
Provider

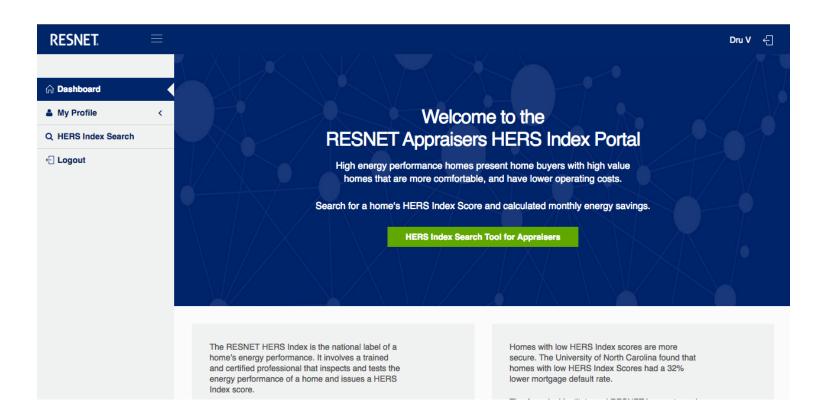
Need to
Educate
REALTORS and
Real Estate
Agents

Up to the Real Estate Agent to choose to include the HERS data.

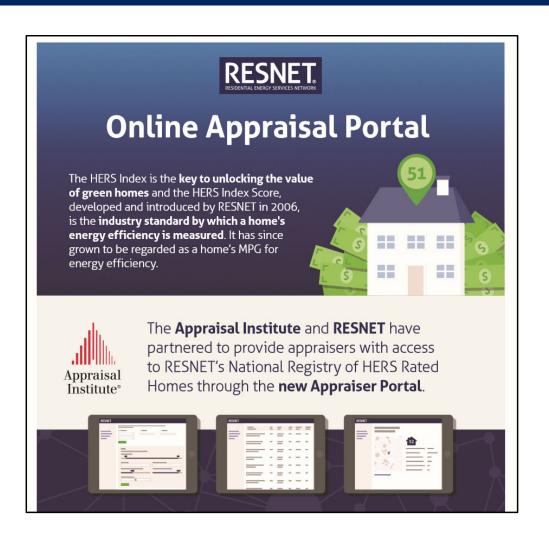
Getting Appraisers to Use HERS Data

The Appraiser Portal

Over 3,500 appraisers with access to the portal!



Infographic-Using the Portal



Accessing the Portal allows appraisers to begin to understand and value the energy efficiency of HERS-rated homes in their market including:



HERS Index



Estimated annual energy costs



Energy cost savings

Appraisers can search for HERS-rated homes in their area by city and state, zip code or address. Search results can be filtered by:

HERS Index score range

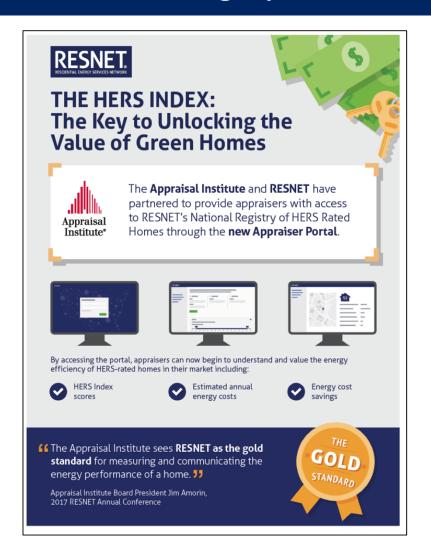
Builder

Year of construction

HERS rating company



Infographic-Unlocking the Value of Green





Updated Website



Appraiser link on homepage of website.

Updated Website



Appraiser Resource Page:

- Infographics
- Portal Launch Webinar
- Access the Portal
- Videos
- Verify HERS Rater Cert.

Sandy Adomatis, SRA, LEED Green Associate, NAR Green

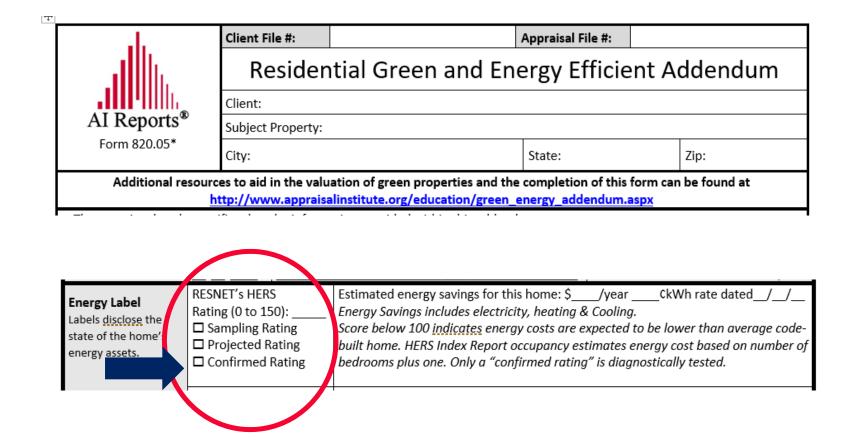
The RESNET Appraiser Portal and Marketing

Secured Portal URL: https://portal.resnet.us/

The RESNET Appraiser Portal is a BIG Deal!



RESNET's Appraisal Portal Includes Confirmed Ratings Only



Differences in HERS Ratings

	Sampling	Projected	Confirmed
Random Testing of a number of houses built by same builder.	X		
Rating based on plans and specifications – preliminary – not tested		X	
Diagnostically tested with blower door and duct blaster			X

A Sampling or Projected rating requires an extraordinary assumption in an appraisal report. Builders should provide a Projected Rating for mortgage lending work to allow appraisers to understand the energy efficiency. A Confirmed Rating cannot be done until the house is completed.

Projected or Sample HERS deserves an "Extraordinary Assumption"

Indicated Value by: Sales Comparison Approach \$ 360,000	Cost Approach (if developed) \$ 365,	100 Income Approach (if developed) \$
The income approach is not applicable in this siz	e and quality housing. The cost ap	proach is relevant in proposed construction and
has strong support for the cost new and site value	e. The sales comparison approach	has some weakness due to the limited number of
two-story house sales; however, the additional two-story house sales; however, how	o-story sales and listings in the add	dendum add credibility to the sales analyzed.
This appraisal is made \Box "as is," X subject to completion per	plans and specifications on the basis of a hypothe	tical condition that the improvements have been completed,
subject to the following repairs or alterations on the basis of a hypoinspection based on the extraordinary assumption that the condition of plans & specifications & Projected HERS Index	othetical condition that the repairs or alterations ha	ve been completed, or subject to the following required
inspection based on the extraordinary assumption that the condition o	r deficiency does not require alteration or repair:	Appraised value is subject to completion per
plans & specifications & Projected HERS Index t	final rating as envisioned in this rep	ort. See Addendum for more details.
Based on a complete visual inspection of the interior dex	terior areas of the subject property, defined	scope of work, statement of assumptions and limiting
conditions, and appraiser's certification, my (our	f the market value, as defined, of the real pr	operty that is the subject of this report is \$ 360,000
as of 09/04/2014	date of inspection and the effective date of t	his appraisal.
Freddie Mac Form 70 March 2005 UAD Version 9/2011	Produced using ACI software, 800.234.8727 www.aciweb.com Page 2 of 6	Fannie Mae Form 1004 March 2005 1004 05UAD 12172013



Projected Rating: Based on Plans, Field Confirmation Required

Uniform E	Energy Rating	System						Energy	Efficient	
1 Star	1 Star Plus	2 Stars	2 Stars Plus	3 Stars	3 Stars Plus	4 St	ars 4	4 Stars Plus	5 Stars	5 Stars Plu
500-401	400-301	300-251	250-201	200-151	150-101	100-	91	90-86	85-71	70 or Less
HERS Inc	lex:	75		Effic	ient Home Co	mpariso	on:	25	% Better	
General I	nformation									
	Conditione	d Area:	2366 sq. ft.			HouseT	ype:	Single-fami	ly detache	d
	Conditioned \	/olume:	22270 cubic ft.			Foundat	tion:	Slab		
	Bed	rooms:	4							
Mechanic	al Systems F	eatures								
P	Air-source hear	t pump:	Electric, Htg: 8.	2 HSPF. CI	g: 14.0 SEER.					
	Water F	leating:	Conventional, N	atural gas,	0.60 EF, 50.0 C	Gal.				
Duc	t Leakage to C	Outside:	141.00 CFM25.							
	Ventilation S	system:	None							
Progra	ammable Then	mostat:	Heating: No	Cooling:	No					
Building	Shell Feature	s								
	Ceili	ng Flat:	R-30.0 w/RB			S	lab:	R-0.0 Edge	, R-0.0 Un	der
	Seale	ed Attic:	NA		Exp	osed Fi	oor:	NA		
	Vaulted	Ceiling:	NA		W	indow T	ype:	U-Value: 0.	350, SHG	C: 0.260
	Above Grade	e Walls:	R-13.0		infil	tration R	ate:	Htg: 5.00 C	lg: 5.00 AC	CH50
	Foundation	Walls:	NA			Meth	hod:	Blower doo	rtest	
Lights an	d Appliance f	eatures								
	Percent Inte	rior Lightin	g: 75.00		Ra	inge/Ov	en Fue	et: Natural	gas	
	Percent Gar	nan Liahtin	g: 100.00		Clo	thes Dry	er Fue	el: Electric		
	rei cent Gai	age Lighting								
		tor (kWh/yr): 691.00		Clot	hes Dry	er CEF	2.62		

REM/Rate - Residential Energy Analysis and Rating Software v15.4.1
This information does not constitute any warranty of energy cost or savings.

© 1985-2017 Noresco, Boulder, Colorado.

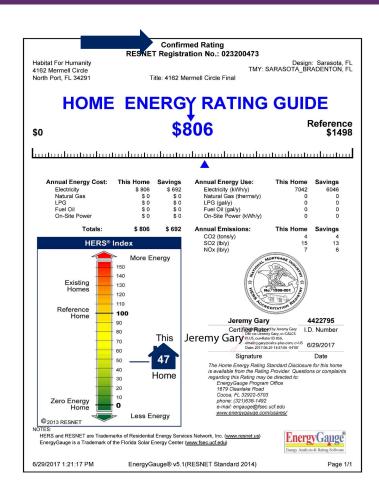
Rating Number: Simulated Performance Analysis Certified Energy Rater: Rating Date: 2017-10-02 Rating Ordered For:

Estim	ated Annual Ene Projected Ratino		
Use	MMBtu	Cost	Percent
Heating	12.4	\$324	21%
Cooling	6.4	\$177	11%
Hot Water	16.3	\$170	11%
Lights/Appliances	25.2	\$626	40%
Photovoltaics	-0.0	\$-0	-0%
Service Charges		\$254	16%
Total	60.3	\$1550	100%

This home meets or exceeds the minimum criteria for all of the following:

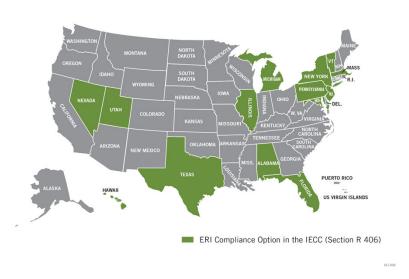
EPA ENERGY STAR Version 2 Home 2006 International Energy Conservation Code 2009 International Energy Conservation Code

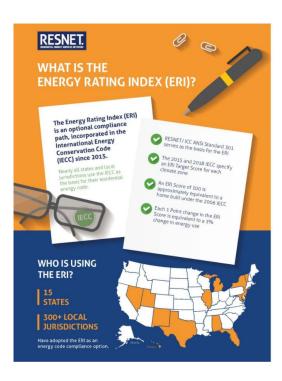






States that Allow the ERI Compliance Option in the International Energy Conservation Code® (IECC®)





ERI is on Building Permit.

Fannie Mae and Freddie Mac Appendix D

Energy Efficient Items

The appraiser must enter any energy efficient items for the subject property and each comparable property. If there are no energy efficient items, enter 'None'.

Reporting Format:

Energy Efficient Items – Text

Energy Efficient Improvements

An energy-efficient property is one that uses resource-effective design, materials, building systems, and site orientation to conserve nonrenewable fuels.

Special energy-saving items must be recognized in the appraisal process and noted on the appraisal report form. For example, when completing the appraisal report (Form 1004), special energy-efficient items are to be addressed in the Improvements section in the Additional features field. The nature of these items and their contribution to value will vary throughout the country because of climactic conditions, differences in utility costs, and overall market reaction to the cost of the feature. Some examples of special energy-efficient features may include, but are not limited to, energy efficient ratings or certifications, programmable thermostats, solar photovoltaic systems, low-e windows, insulated ducts, and tank-less water heaters.

Appraisers must compare energy-efficient features of the subject property to those of comparable properties in the Sales Comparison Approach adjustment grid. If the appraiser's analysis determines that an adjustment is warranted based on the market reaction to such item(s), the adjustment must be included in the adjustment grid.

Solar panels that are leased from or owned by a third party under a power purchase agreement or other similar arrangement are to be considered personal property items and are not included in the appraised value of the property. See <u>B2-3-04</u>, <u>Special Property Eligibility Considerations (02/23/2016)</u>, for additional eligibility requirements for properties with solar panels.

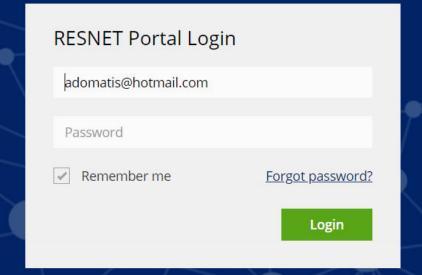
Printed copies may not be the most current version. For the most current version, go to the online version at https://www.fanniemae.com/singlefamily/originating-underwriting.

5/1/2018 Guide

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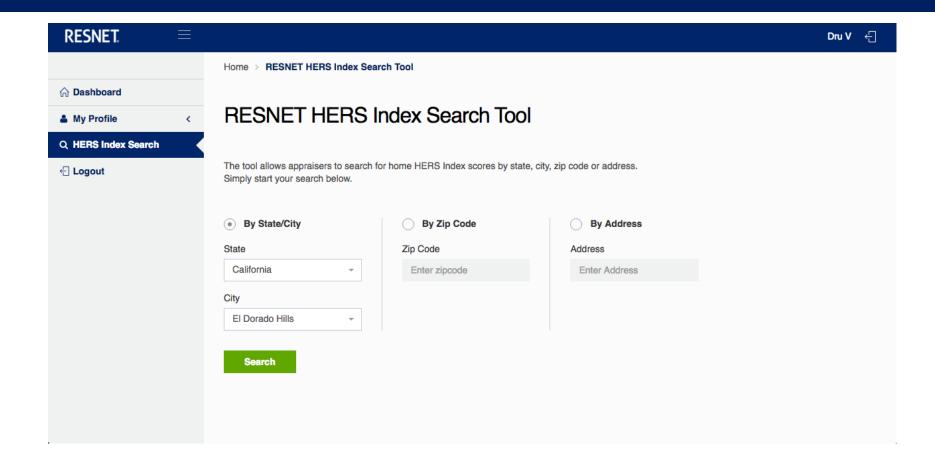
Fannie Mae Selling Guidelines... Market Reaction

RESNET.



https://portal.resnet.us/

Comparable Sales Search

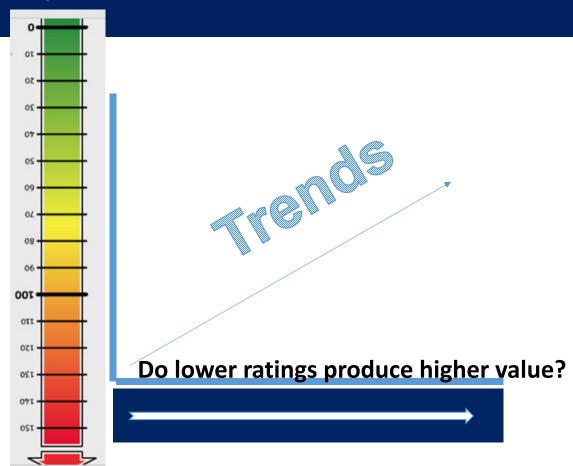


Sales Comparison Approach that meets Fannie Mae Guidelines and Appraisal Standards

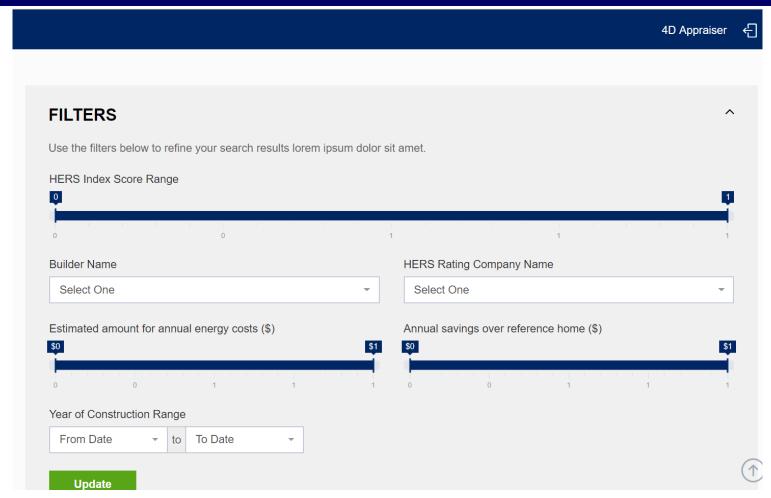
View	Residential/vacant Residential/v				ial/vacant		Residential/vacant					Residential/vacant						
Design (Style)	Rar	Ranch			Ranch				Rai	Ranch					Ranch			
Quality of Construction	ZEF	RH,E	S, FGBC	Code Built-2014				Code Built-2014					Code Built-2014					
Actual Age	0+/-	- Yea	ars	0+/- Years 0+/- Years				0+/- Years										
Condition	Nev	V		Nev	N		New							New				
Above Grade	Total	Bdrms.	Baths	Total	Bdrms.	Baths			Total	Bdrms.	rms. Baths			Total	Bdrms.	Baths		
Room Count	5	3	2	6	3 2		6	3	2			6	3	2				
Gross Living Area		1	1,437 sq. ft. 1,437 sq. ft.				1,437 sq. ft.					1,437 sq. ft.						
Basement & Finished	n/a n/a				n/a					n/a								
Rooms Below Grade	n/a		n/a			n/a			n/a									
Functional Utility	Ave	Average Average				Average					Average							
Heating/Cooling	FW	A C/	Air	ir FWA C/Air			FWA C/Air					FWA C/Air						
Energy Efficient Items	HEI	RS 4	7	No HERS, Inf			9,595	No	HEF	RS, Inf		No HERS, Inf				9,345		
Garage/Carport	One	One Car Garage Two Car Garage			-5,000	Tw	Two Car Garage		-5,000		Two Car Gara		r Garage		-5,000			
Porch/Patio/Deck	Cov	Cov Entry Cov Entry, Lanai			-5,000	Cov	Cov Entry, Lanai		-	5,000	Cov Entry, Lanai		ry, Lanai		-5,000			
Utilities	Well/Septic City Wtr/Septic					City	/ Wti	/Septic			Well/Septic							
Days on market				22					8					6				

Comparable Sales Search

- By State
- By City
- By Zip Code
- By Address



Filter Results



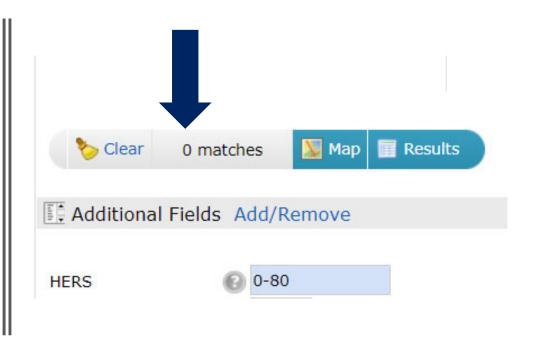
©Copyright Adomatis &6praisal Service 2018

Results - Market Reaction?



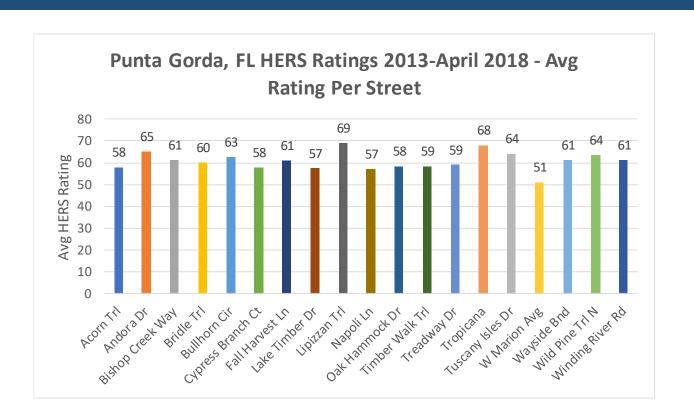
10085 Winding River Rd, Punta Gorda, FL 33950 View **HERS Index Score** Winding River Rd Builder's Name: **KB** Home HERS Rating Company: Year of Construction: 2016 Date submitted to Registry: 2017 Annual Energy Costs: \$1415 idge Dr Annual Energy Savings: \$893 Winding River Rd **Energy Star Certified:** No KB Home Oak Harbour Google Map data ©2018 Google Terms of Use



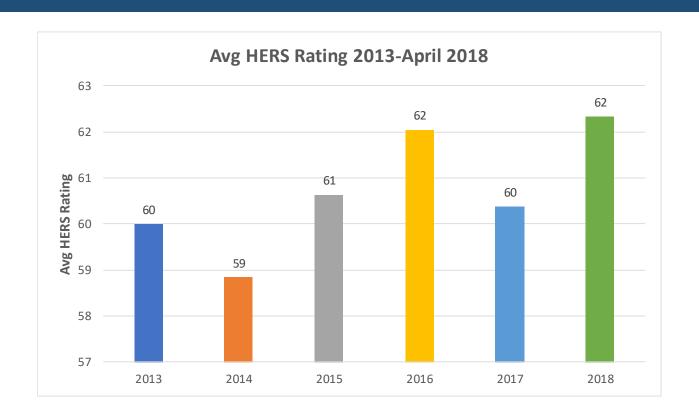


So, what does the MLS show in this market?

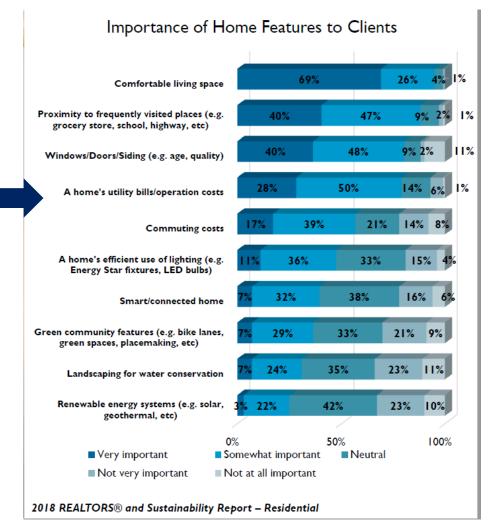
Market Reaction Supported



Market Reaction Supported



Market Reaction Supported?



MLS shows no HERS?????

200 shown in RESNET Appraisal Portal

Year	Avg HERS Rating	# of Ratings
2013	60	9
2014	59	19
2015	61	55
2016	62	62
2017	60	55
Apr-18	62	3
Avg.	61	40

Now I have addresses to research

These addresses give appraisers a place to start the sales search for not only comparable data but for...

Paired-data analysis.
Pairing sales with differing
HERS Ratings may provide
direct market support for
the value of the energy
efficient features.

Paired-Data Analysis

	Sale A	Sale B	
Sale Date	02/05/2018	12/25/2017	
Sales Price	\$225,000	\$235,000	
Living Area	2,100	2,125	
Bedrooms/baths	3/2.5	3/2.5	
HERS Rating	65	45	
Location	Sunny Side	Sunny Side	
Sale Price Difference	\$235,000-\$225,000=\$10,000 for 20 points difference in HERS Rating		

Note: For educational purposes only, not actual sales

ENERGY STAR®

RESNET HERS Registry is only place to identify ENERGY STAR® Certified Homes to answer:

- 1. Do they sell for more?
- 2. Do they experience fewer days on market?
- 3. Is new construction in your market seeing more ENERGY STAR® homes?

A Full HERS Report Provides Valuable Valuation Data like these

Details of construction and energy features

Basis for comparing sales

Data to develop an income approach to value using energy savings

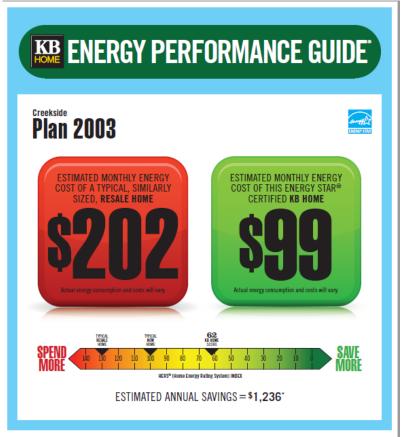
A third-party report that gives credibility to the term "energy-efficient" home.

MLS Listings and Builders Must Change the Advertising

BRAND NEW CONSTRUCTION HOME MOVE IN READY!!! 4 bedrooms 2 ½ baths, Flooring Vinyl downstairs, Carpet upstairs, Kitchen island bar-top height, includes Range /oven, Fan Hood, Dishwasher, 2nd floor Laundry room, Extended vanity in Master Bath, standard tub shower in both baths. Covered porch in front, cul-de-sac lot, 2 car garage with door opener Home is complete and ready!



Attaching this to the MLS without populating HERS searchable field does not help.



62015 KB Home. The HERS® index is a registered trademark of the Residential Energy Services Network (RESNET). KB Home is not affiliated with RESNET or its service providers, or with any energy efficiency rating organization or related episterior control providers, contemporary and control of the related in the control of the related in the control of the related in the control of the control of the related in the related into the related in the related in the related in the related into the related in the related in the related into the related in the related in the related into the related into the related into the related in the related into t

Marketing May Influence Sales Price

Pearl Gold Crozet, VA	Contract Date	Days on Market	Sold Price	Adjusted Sale Price	Living Area	Sales Price Premium (Pearl Sale Price- Adjusted Non Green Sale Price)	Premium as % of Sale Price (Premium/Pearl Sale Price)	Age Yrs
	gle-Unit Detac	hed						
Pearl	2/26/2017	29	\$477,000		2,170			15
Pair 13	7/8/2016	63	\$445,000	\$430,766	2,535	\$46,234	9.69%	9
Pair 14	7/30/2016	1	\$449,900	\$435,792	2,518	\$41,208	8.64%	19

The MLS included Pearl Home Certification documents including the Al Residential Green and Energy Efficient Addendum. The photograph gallery had the Pearl Certificate. The second sentence of the comments said, "Gold certified efficiency rating from Pearl."

MLS Listing that maximizes the energy features

NOW COMPLETE! Walking distance to the town center w/a variety of shops & restaurants. This new, energy efficient home features an open floor plan, family room and 4th bedroom plus bath in basement, and 3 bedrooms and 2 full baths upstairs. This section allows rental income over the garage and this home features an 1BR apartment in the oversized 22'x24' garage. Beautiful hardwood flooring throughout main level, granite, stainless appliances and custom trim work. This home achieved a HERS score of 48 and includes high SEER mini -split HVAC as well as foam insulation and tankless water heater. Cost of ownership will be much lower than the average home. PEARL Certified Platinum Level.

Source: MLS Listing

Certification Attached and a JPG in MLS Photograph Gallery



Maximizing Marketing

- Include HERS in searchable MLS field
- Attach HERS Report to MLS
- Insert HERS Certificate as a JPG in MLS photograph gallery
- Attach completed AI Residential Green & Energy Efficient
 Addendum
- Attach completed lender letter from "Appraised Value & Energy Efficiency: Getting it Right" brochure

Learn more about how to implement green into appraisals & marketing



A Guide to the Residential Green and Energy Efficient Addendum

By Sandra K. Adomatis, SRA, LEED Green Associate, NAR GREEN May 2018

Reviewed by Ben Hoen of Lawrence Berkeley National Laboratory

PART II. ENERGY LABEL

Energy Label	RESNET's HERS Rating (0 to 150): Sampling Rating Projected Rating Confirmed Rating		Estimated energy savings for this home: \$	
Labels disclose the state of the home's energy assets. The hoe below			Energy Savings includes electricity, heating & Cooling. Score below 100 indicates energy costs are expected to be lower than average codebuilt home. HERS Index Report occupancy estimates energy cost based on number of bedrooms plus one. Only a "confirmed rating" is diagnostically tested.	
	DOE's Home Energy Score Score (1 to 10): Official Score Unofficial Score		Estimated energy savings for this home: \$/yearckWh rate dated//_ Energy Savings includes electricity, heating & Cooling. Score above five indicates energy costs are expected to be lower than average local home. Home Energy Score estimates energy cost based on state average energy rates and the home's energy features.	
	Other Energy Score: Range (to):		Estimated energy savings: \$/year¢ kWh rate dated//_ Describe energy label system:	
	Date Verified:	Organizati	tating Version: ion URL: www.resnet.us/ omeenergyscore.gov	ABOVE VALID ONLY IF CHECKED: ☐ Verification reviewed on site ☐ Verification attached to this report

Guide Addresses Appraiser, Listing, & Lender Relevance for each section.

- Where does it go on the 1004?
- Why is it important?
- How can it be used in marketing?
- How can lender use in underwriting?

Valuation of Sustainable Buildings

Title	Hours	State Approval
Introduction to Green Buildings	8	State Approval
Case Studies in Appraising Green Residential Buildings	8	State Approval
Residential and Commercial Valuation of Solar	15	State Approval
Case Studies in Appraising Green Commercial Buildings	15	State Approval
Practical Applications in Appraising Green Commercial Properties	15	State Approval

FAQs

<u>Program Registry – Residential</u> <u>Program Registry – Commercial</u>

https://www.appraisalinstitute.org/education/yourcareer/professional-developmentprograms/#Valuation%20of%20Sustainable%20Buildings

Appraiser Education Opportunities



Thank you!

Contact Info:

Ryan Meres RESNET

Contact Info:

Sandy Adomatis, SRA, LEED Green Assoc., NAR Green

Adomatis@Hotmail.com



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