



Setting the Standards for
Home Energy Efficiency

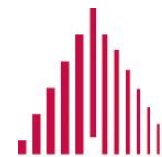


Mainstreaming the HERS Index in the Housing Market The RESNET - Appraisal Institute Partnership

**Scott Robinson, MAI, SRA, AI-GRS
Appraisal Institute President**

What is the Appraisal Institute?

- Serves the public
- Minimum requirements
- Confers designations

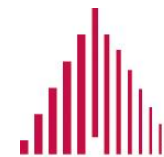


**Appraisal
Institute®**

*Professionals Providing
Real Estate Solutions*

What is the Appraisal Institute?

- Standards and ethics
- Professionalism
- Nearly 85-year history
- 20,000 professionals



**Appraisal
Institute®**

*Professionals Providing
Real Estate Solutions*

Appraisal Institute Green Appraiser Registry

- <http://ow.ly/YHoDJ>

Valuation of Sustainable Buildings: Residential

Professional Development Program Registry

NOTE: This Registry lists the names of Designated Members, Candidates, Practicing Affiliates, Affiliates and other individuals not in one such category who have successfully completed (attended and passed the examinations) the courses in this section of the *Valuation of Sustainable Buildings Professional Development Program* examinations.

There may be other qualified Appraisal Institute Designated members who may handle green/sustainability assignments but have not taken the *Valuation of Sustainable Buildings Professional Development Program*. [Visit the Find an Appraiser directory](#) to find Designated members who have identified green/sustainability as a specialty.

[View Program FAQs](#) ›

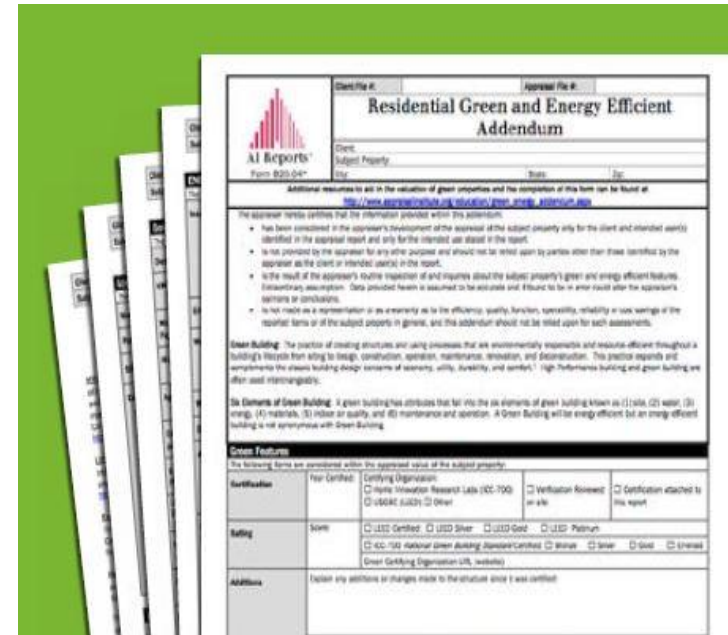
[Please read this notice regarding Professional Development Programs](#) ›

* Has not completed the Residential and Commercial Valuation of Solar course. Those on the registry have until February 28, 2015 to complete Residential and Commercial Valuation of Solar to remain on the registry. After March 1, 2015, participants must take all required courses, including Residential and Commercial Valuation of Solar, before being placed on the Registry.

Select State/Province 

Appraisal Institute Green Addendum

- Analyze home features
- Fannie Mae form 1004
- Addendum updates
- Data limitations
- USGBC, NAHB input
- New energy fields
- Solar section
- Value to builders, others
- Homeowner input



AI Reports
Form #20-04*

Residential Green and Energy Efficient Addendum

Client File #: _____ Appraisal File #: _____
Client: _____
Subject Property: _____
City: _____ State: _____ Zip: _____

Additional references to all in the valuation of green properties and the completion of this form can be found at <http://www.appraisalinstitute.com/valuation/green-addendum.html>

The appraiser hereby certifies that the information provided within this addendum:

- has been considered in the appraiser's development of the appraisal of the subject property only for the client and intended users identified in the appraisal report and only for the intended use stated in the report.
- is not provided by the appraiser for any other purpose and should not be relied upon by parties other than those identified by the appraiser as the client or intended users in the report.
- is the result of the appraiser's routine inspection of and inquiries about the subject property's green and energy efficient features. (Excludes assumptions.) Data provided herein is required to be accurate and should be to be in error until after the appraiser's ordinary or customary care.
- is not made as a representation or as warranty as to the efficiency, quality, function, operability, reliability or workmanship of the reported items or of the subject property in general, and the addendum should not be relied upon for such assessments.

Green Building: The practice of creating structures and using processes that are environmentally responsible and resource efficient throughout a building's lifecycle from siting to design, construction, operation, maintenance, renovation, and deconstruction. This practice expands and complements the existing building design concepts of economy, utility, durability, and safety. High Performance building and green building are often used interchangeably.

Six Elements of Green Building: A green building has attributes that fall into the six elements of green building known as (1) site, (2) water, (3) energy, (4) materials, (5) indoor air quality, and (6) maintenance and operation. A Green Building will be energy efficient but an energy efficient building is not synonymous with Green Building.

Green Features

The following items are referenced within the appraisal report of the subject property:

Verification	For Certified:	Certifying Organization:			
		<input type="checkbox"/> U.S. Green Building Council (USGBC) LEED	<input type="checkbox"/> U.S. Green Building Council (USGBC) GreenSource	<input type="checkbox"/> U.S. Green Building Council (USGBC) GreenPower	
Rating	Score:	<input type="checkbox"/> LEED Certified	<input type="checkbox"/> LEED Silver	<input type="checkbox"/> LEED Gold	<input type="checkbox"/> LEED Platinum
		<input type="checkbox"/> Energy Star	<input type="checkbox"/> Energy Star Certified	<input type="checkbox"/> Energy Star Qualified	<input type="checkbox"/> Energy Star Green Building
Address	Other:	<input type="checkbox"/> GreenSource	<input type="checkbox"/> GreenPower	<input type="checkbox"/> GreenSource	<input type="checkbox"/> GreenPower
		<input type="checkbox"/> GreenSource	<input type="checkbox"/> GreenPower	<input type="checkbox"/> GreenSource	<input type="checkbox"/> GreenPower

Address: _____
Enter any additions or changes made to the structure since I was certified.

Appraisal Institute Green Addendum

- Alerts lender property is special
- Recognize special features
- Credible value opinion
- Brag sheet

Residential Green and Energy Efficient Addendum

Client File #: _____ Appraisal File #: _____
Date: _____
Subject Property: _____
Year: _____

Additional references to all in the valuation of green properties and the completion of this form can be found at <http://www.appraisalinstitute.com/valuation/green-addendum.pdf>

The appraiser hereby certifies that the information provided within this addendum:

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- is not provided by the appraiser for any other purpose and should not be relied upon by parties other than those identified by the appraiser as the client or intended users in the report.
- is the result of the appraiser's routine inspection of and inquiries about the subject property's green and energy efficient features. (Exclusionary assumption: Data provided herein is assumed to be accurate and should not be in error until after the appraiser's ordinary or conclusions.)
- is not made as a representation or as warranty as to the efficiency, quality, function, operability, reliability or work savings of the reported items or of the subject property in general, and the addendum should not be relied upon for such assessments.

Green Building: The practice of creating structures and using processes that are environmentally responsible and resource efficient throughout a building's lifecycle from siting to design, construction, operation, maintenance, renovation, and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort. High Performance building and green building are often used interchangeably.

Six Elements of Green Building: A green building has attributes that fall into the six elements of green building known as (1) site, (2) water, (3) energy, (4) materials, (5) indoor air quality, and (6) maintenance and operation. A Green Building will be energy efficient but an energy efficient building is not synonymous with Green Building.

Green Features

The following items are referenced within the appraisal report of the subject property:

Verification	For Certified	Certifying Organization	For Other	Verification Reviewed	Certification Attached to this report
	<input type="checkbox"/>	U.S. Green Building Council (USGBC) LEED (V2009)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	GreenSource (USGBC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Rating

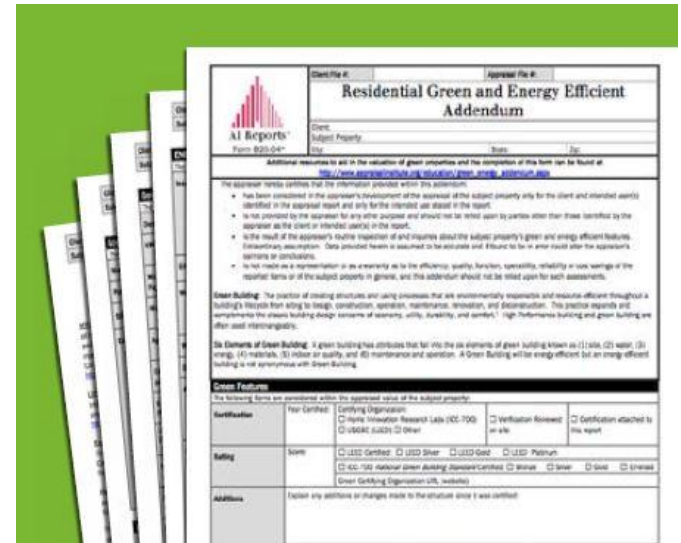
	<input type="checkbox"/>	LEED Certified	<input type="checkbox"/>	LEED Silver	<input type="checkbox"/>	LEED Gold	<input type="checkbox"/>	LEED Platinum
	<input type="checkbox"/>	GreenSource Green Building Standard/Certified	<input type="checkbox"/>	GreenSource	<input type="checkbox"/>	GreenSource	<input type="checkbox"/>	GreenSource Platinum

Additional

Enter any additions or changes made to the structure since I was built!

Appraisal Institute Green Addendum

- Rater
- Builder
- Architect
- Owner
- Developer



Residential Green and Energy Efficient Addendum

Client: _____ **Appraisal File #:** _____
Subject Property: _____

Form 820 (2-04) **Date:** _____ **File:** _____

Additional requirements to act in the valuation of green properties and the completion of this form can be found at http://www.appraisalinstitute.org/valuation/green_energy_addendum.asp

The appraiser heretofore certifies that the information provided within this addendum:

- has been completed in the appraiser's development of the appraisal of the subject property only for the client and intended agents identified in the appraisal report and only for the intended use stated in the report.
- is not provided by the appraiser for any other purpose and should not be relied upon by parties other than those identified by the appraiser as the client or intended agents in this report.
- is the result of the appraiser's routine inspection of and inquiries about the subject property's green and energy efficient features, characteristics, assumptions. Data provided herein is assumed to be accurate and is found to be in error must enter the appraiser's remarks or conclusions.
- is not made as a representation or an warranty as to the efficiency, quality, function, operability, reliability or use savings of the reported items or of the subject property in general, and this addendum should not be relied upon for such assessments.

Green Building: The practice of creating structures and using processes that are environmentally responsible and resource efficient throughout a building's lifecycle from siting to design, construction, operation, maintenance, renovation, and demolition. This practice respects and complements the green building design concepts of economy, utility, durability, and quality. High Performance building and green building are often used interchangeably.

Six Elements of Green Building: A green building has attributes that fall into the six elements of green building known as (1) site, (2) water, (3) energy, (4) materials, (5) indoor air quality, and (6) maintenance and operation. A Green Building will be energy efficient but an energy-efficient building is not synonymous with Green Building.

Green Features:

The following items are considered within the appraised value of the subject property:

Certification	Year Certified	Certifying Organization	Year Certified	Certification Attached to this report
<input type="checkbox"/> LEED Certified	<input type="checkbox"/> LEED Silver	<input type="checkbox"/> USGBC	<input type="checkbox"/> Verified	<input type="checkbox"/> Certification attached to this report
<input type="checkbox"/> Energy Star	<input type="checkbox"/> Energy Star	<input type="checkbox"/> U.S. Environmental Protection Agency	<input type="checkbox"/> Verified	<input type="checkbox"/> Certification attached to this report

Rating: None LEED Certified LEED Silver LEED Gold LEED Platinum

ASHRAE 90.1-2001 certified energy modeling demonstration GreenSource GreenSource GreenSource

Additional: Enter any additional changes made to the attached price I was certified.

Appraisal Institute Green Initiatives

- Appraisal Institute education
- AI books
- Professional development program



Appraisal Institute Green Partnerships

- AI-BCAP partnership
- Institute for Market Transformation
- Build It Green
- Colorado Energy Office



Appraisal Institute Green Studies

- U.S. Department of Energy
- Solar PV systems



AI-RESNET Partnership

- Current initiative
- Research and studies
- Joint leadership



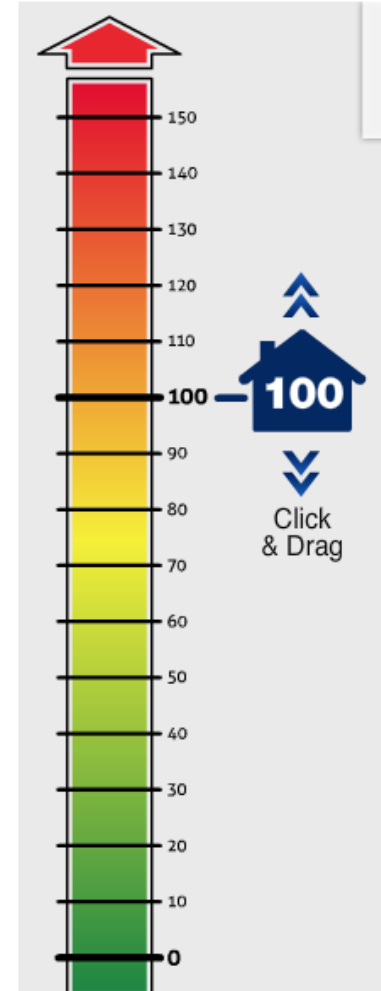
AI-RESNET Partnership

- Previous initiatives
- Licensing agreement



HERS Rating and the Valuation Process

- Growth in number of HERS Ratings
- RESNET making a difference
- March 2 presentation
- Quality energy ratings



HERS Rating and the Valuation Process

3-year HERS history

State	AVG HERS			# HERS			Total #	% of	% of	% of	% of
	2013	2014	2015	2013	2014	2015	Building Permits 2013-2015	Permits w/HERS 2013-2015	Permits w/HERS 2013	Permits w/HERS 2014	Permits w/HERS 2015
NM	55	56	59	1093	1348	1622	11575	35.1%	30.6%	33.2%	41.0%
NV	65	62	62	2699	4317	5065	28278	42.7%	30.1%	48.6%	48.6%
CT	56	53	55	899	819	1194	8048	36.2%	31.5%	29.7%	49.1%
AZ	61	62	63	3049	9597	11244	57847	41.3%	16.6%	57.0%	49.7%
CO	60	59	57	7093	8382	10146	52698	48.6%	45.0%	49.0%	51.2%
OH	60	59	60	7325	5995	6894	38461	52.6%	57.6%	47.8%	52.2%
MD	60	59	57	6300	5741	5903	32182	55.8%	59.1%	54.5%	53.8%
DE	59	57	55	1764	1586	2332	12127	46.9%	46.9%	38.3%	55.2%
DC	66	65	67	129	112	166	876	46.5%	38.7%	38.9%	65.1%
IA	61	60	59	4099	4078	4871	21920	59.5%	54.1%	58.3%	66.2%
IN	68	67	66	8805	8364	9196	36555	72.1%	72.8%	68.9%	74.6%
MA	58	62	56	4879	5333	5692	21277	74.7%	68.7%	72.8%	83.1%

HERS Rating and the Valuation Process

- Appraisal Institute efforts
- Feedback from instructors



HERS Rating and Market Understanding

- Market needs to understand HERS
- Measure of value
- Populating MLS
- Appraisers and HERS
- Lenders and HERS



HERS Rating and Market Understanding

- Market education
- Quality control





Setting the Standards for
Home Energy Efficiency

20 YEARS OF
SUCCESS | Setting the
Standards for Quality
1996 - 2016

Mainstreaming the HERS Index in the Housing Market The RESNET - Appraisal Institute Partnership

**Steve Baden
RESNET Executive Director**

Elements of RESNET-Appraisal Institute Partnership

RESNET and the Appraisal Institute will develop an access to the RESNET Registry so that residential real estate appraisers can search 24/7 in real time the following information:

- The HERS Index score of a home
- The HERS rating company that rated the home
- The date the home was HERS Rated
- The projected energy savings of the home

Elements of RESNET-Appraisal Institute Partnership

The two organizations agreed to work together to present education programs on real estate valuation topics and the HERS Index to appraisers, builders, developers and other interested individuals.

Potential Impact of Partnership

The partnership can be a game changer in terms of real estate appraiser evaluation of the energy performance of a home as part of the appraisal process.

Residential real estate appraisers will be able to search for homes with comparable HERS Index scores in determining the market value of such feature of a home in the market.

Importance of Education Effort

- Residential real estate appraisers needs to know the value of HERS Ratings and that the online resource is available
- HERS Raters need to educate clients of new resource and its importance
- Builders need to educate the appraiser valuing their homes of the value of the HERS Index and availability of the resource

Ideas of Elements of Education Effort

- Factsheets
- Video like the ICC/RESNET code official production
- Webinars
- Your ideas?