

HERS Industry 101

Daran Wastchak, D.R. Wastchak, LLC

Kelly Parker, Guaranteed Watt Saver Systems



Course Objectives

- ☐ Provide comprehensive overview of Home Energy Rating industry for those new to / unfamiliar with ratings
- ☐ Prepare conference participants for other conference sessions

Presentation Outline

- ☐ History and Overview
- ☐ Joining the Rating Industry
- ☐ National Home Energy Rating Standards
- ☐ Rater Resources
- ☐ Completing a Rating
- ☐ Energy Mortgages

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History and Overview

- ☐ History of the Rating Industry
 - 1981 - Group of mortgage industry leaders set up the National Shelter Industry Energy Advisory Council
 - Goal - Measure the monetary savings attributable to the energy efficient features of a home
 - Goal - Giving credit for energy efficiency in a mortgage
 - Council created Energy Rated Homes of America
 - Early 1980's - Fannie Mae, Freddie Mac, the U.S. Department of Housing and Urban Affairs, Federal Housing Administration (FHA) and the Veterans Administration (VA) all adopted energy mortgage programs

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History and Overview

☐ History of the Rating Industry (cont'd)

- April 1995 - Representatives of the national mortgage industry, the National Association of State Energy Officials, and Energy Rated Homes of America founded the Residential Energy Services Network (RESNET)
- Goal - Develop national standards for home energy ratings and to create a market for home energy rating systems and energy mortgages
- 2002 - RESNET became incorporated as a 501 (c) (3) non-profit organization and Energy Rated Homes of America merged into the organization
- 2002 – First RESNET National Conference in Coco Beach, FL

History and Overview

☐ RESNET

- Key services
 - ☐ Maintain National Home Energy Rating Standards
 - ☐ Accredite Rating Providers, Rating Software Programs and Rater Training Providers
 - ☐ Work with the Mortgage Industry in Developing and Promoting New Energy Mortgage Products

History and Overview

☐ Board of Directors

President	Ben Adams , MaGrann Associates
Philip Fairey	Eric Borsting , ConSol
Vice President	Megan Edmunds , E-Star Colorado
David Goldstein	Richard Faesy , Vermont Energy Investment Corporation
Treasurer	Philip Fairey , Florida Solar Energy Center
Thomas Hamilton	Kathy Howard , Energy Sense
Secretary	Joseph Lstiburek , Building Science Corporation
Kelly Parker	Greg Nahn , Wisconsin Energy Conservation Corporation
Immediate Past President	Lee O'Neal , NSpects, LTD
David Wilson	Kelly Parker , Guaranteed Watt Saver Systems
	Bruce Harley , Conservation Services Group
	Douglas Walter , Kansas Building Science Institute
	Michael Holtz , Architectural Energy Corporation
	Tracy Fogelsong , EnerCalc
	Mark Jansen – Energy Rated Homes of Indiana
	Gayle Sampson – Ohio
	David Wilson - Energy Rated Homes of Utah
	Daran Wastchak – D.R. Wastchak, LLC
	David Goldstein , Natural Resources Defense Council

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History and Overview

☐ Standing Committees

- Quality Assurance and Ethics Committee
 - ☐ Issues interpretations on Chapter One of the national rating standards
 - ☐ Oversight of RESNET's rating quality assurance program
 - ☐ Investigates and makes recommendations on code of ethics complaints
- Training and Certification Committee
 - ☐ Issues interpretations on Chapter Two of the national rating standards
 - ☐ Maintenance of the national rater test
 - ☐ Approval of all RESNET education programs
 - ☐ Maintenance of RESNET rater certification categories

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History and Overview

☐ Standing Committees (cont'd)

- Technical Committee
 - ☐ Interpretation of technical standards, procedures and guidelines (Chapter 3)
 - ☐ Technical evaluation of issues and programs
 - ☐ Continuing maintenance of technical standards
- Membership Services Committee
 - ☐ Develops plans for recruitment of members and board members of RESNET
 - ☐ Serve as the nominations committee for the board
 - ☐ Provide policy oversight for the annual RESNET Conference

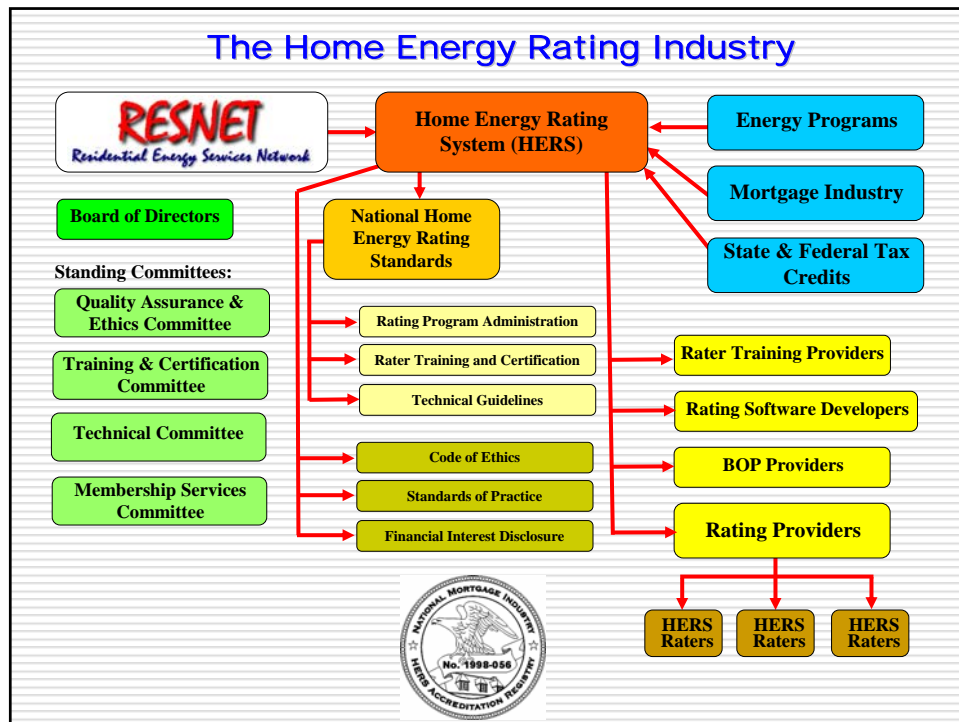
History and Overview

☐ Membership

- Associate Member – non-rater membership
- Rater Member – certified rater membership
- Trial Member – free 30-day trial period

☐ Providers

- Rating Providers
- Rater Training Providers
- Rating Software Developers
- BOP (Builder Option Package) Providers



Joining the Rating Industry

- ☐ Becoming a Rating Provider
 - \$500 application fee (non-refundable)
 - \$1,500 total annual fee
 - Meet accreditation criteria:
 - ☐ Raters must be trained by a RESNET accredited rater training provider
 - ☐ Meet certification standards
(Complete requirements available in Chapter One of *Mortgage Industry National Home Energy Rating Systems Accreditation Standards*)

Joining the Rating Industry

☐ Becoming a Rating Provider

- HERS Operation Policies & Procedures must be written and provide for the following:
 - ☐ Ratings from plans
 - ☐ Field inspections
 - ☐ Blower door tests
 - ☐ Duct leakage testing
 - ☐ Written conflict of interest provisions
 - ☐ Written rater discipline procedures
 - ☐ Written rater quality control process

Joining the Rating Industry

☐ Becoming a Rating Provider

- Accreditation Process
 - ☐ State Energy Office Review
 - ☐ Where state does not operate a Home Energy Rating System...file application with the appropriate state energy office
 - ☐ Where state does operate a Home Energy Rating System...file self-certification statement
 - ☐ For a home energy rating system which desires to operate in a state that operates its own home energy rating system, the Committee shall inform the state and provide an opportunity for the state to provide comments.

Joining the Rating Industry

- ☐ Becoming a Rating Provider
 - Home Energy Rating System Application for Renewal
 - Suspension and revocation of accreditation
 - Appeals procedure for applications that are not approved as well as suspension & revocation of certifications

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Joining the Rating Industry

- ☐ Becoming a Certified Rater
 - Complete rater training with RESNET certified Rater Training Provider
 - Pass National Rater Training Exam
 - Complete five (5) ratings which are supervised/ reviewed by Training Provider or Rating Provider
 - Select and work under a Rating Provider
 - Meet any specific requirements established by Rating Provider

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National Home Energy Rating Standards

- ☐ Chapter 1 - Rating Program Administration
- ☐ Chapter 2 - Rater Training and Certification
- ☐ Chapter 3 - Technical Guidelines

National Home Energy Rating Standards

- ☐ Comprehensive Enhancement of RESNET National Home Energy Rating Standards
 - WHY? Enhance the Quality and Consistency of Ratings as Rating Industry Expands to Meet Growing Demand for Rating Services
 - Two Categories of Enhancements
 - ☐ Program Administration (Will not affect rating score)
 - Goes into effect on April 1, 2005
 - ☐ Technical (Will impact how rating scores are calculated)
 - Goes into effect on January 1, 2006

National Home Energy Rating Standards

- ☐ Program Administration Enhancements
 - Rater Financial Interest Disclosure
 - Rating Software Verification Testing
 - Clearer Rating Quality Assurance Provisions

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National Home Energy Rating Standards

- ☐ Program Administration Enhancements
 - Rater Financial Interest Disclosure
 - ☐ Standardized disclosure form that Raters must complete and give to their clients which states their financial interest in the home being rated
 - ☐ Requires Rating Providers to provide disclosure form to builders/homebuyer upon request
 - Rating Software Verification Testing
 - ☐ Requires Rating Providers to use only RESNET accredited rating software programs
 - ☐ Have 60 days upon release of updated version of program to use old version
 - ☐ Can use older version of software on project where projected rating has been completed

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National Home Energy Rating Standards

- ☐ Program Administration Enhancements
 - Clearer Rating Quality Assurance Provisions
 - ☞ Provider Policies & Procedures must include at a minimum:
 - ☐ Review of ratings conducted during a rater's probation period
 - ☐ Review of a minimum of 25% of each rater's rating data files
 - ☐ Field monitoring of rater's ratings:
 - ☐ Complaint Response System for Receiving and Responding to Consumer Complaints.
 - ☐ Rating Record Keeping
 - ☐ Rating Provider Quality Assurance Designee

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National Home Energy Rating Standards

- ☐ Program Administration Enhancements
 - Clearer Rating Quality Assurance Provisions
 - ☐ RESNET Quality Assurance Review of Providers
 - ☐ Annual random selection of providers to conduct review of files
 - ☐ Significant inconsistencies or errors in the files reviewed may result in a independent field review by RESNET representative
 - ☐ RESNET process for receiving ethics complaints against accredited provider

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National Home Energy Rating Standards

- ☐ Rater Training and Certification Enhancements
 - National Rater Testing
 - ☐ Requires that by January 2008, all existing certified raters must pass the National Home Energy Rating Test administered by RESNET
 - ☐ Rater Continuing Education Requirements
 - 12 Credit hours every three (3) years
 - 10 of the 12 hours of rater continuing education must be approved by RESNET

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National Home Energy Rating Standards

- ☐ Technical Enhancements
 - Goals of Technical Enhancements
 - ☐ Enhance the Technical Basis of Energy Ratings
 - ☐ Update Rating Standards to bring into alignment with current national standards (IECC, Zero Energy Homes, Proposed Tax Credits)
 - Key Technical Enhancements
 - ☐ Align rating reference home to the IECC
 - ☐ Voluntary option of expanding rating score to credit efficient lighting and appliances and on-site production of energy in the rating score
 - ☐ Clearer insulation inspection procedures
 - ☐ Definition of standards for measuring air tightness
 - ☐ Enhanced blower door procedures
 - ☐ Procedures for measuring floor dimensions
 - ☐ Auxiliary energy consumption

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National Home Energy Rating Standards

☐ Technical Enhancements

■ Key Technical Enhancements (cont'd)

- ☐ Coefficients for oil heat
- ☐ Renewable energy sources in the reference home
- ☐ Natural ventilation rates in the reference home
- ☐ Discount rate and life of measures used for energy mortgages
- ☐ Standardized economic calculation of present value for energy mortgages
- ☐ Default framing factors for enclosed elements
- ☐ HEIR for heat pumps
- ☐ Proper sizing for heat pumps and air conditioners
- ☐ Biomass fuel efficiencies
- ☐ Home inspection standards
- ☐ Definition of a home
- ☐ Future guideline requirements

Rater Resources

- ☐ Rater Codes of Ethics
- ☐ Rating Standards of Practice
- ☐ Rater Financial Interest Disclosure

Rater Resources

☐ Rater Codes of Ethics

- Sets forth principles and rules of conduct for accredited RESNET Rating Providers, their Raters and their representatives.
 - ☐ Professional Conduct
 - ☐ Representation of Services and Fees
 - ☐ Conflicts of Interest

www.natresnet.org/standards/ethics.htm

Rater Resources

☐ Rating Standards of Practice

- Establishes minimum and uniform standards for certified raters
 - ☐ Minimum rated features
 - ☐ Rating report
 - ☐ General limitations and exclusions

www.natresnet.org/standards/rating/rating_standards.pdf

Rater Resources

☐ Rater Financial Interest Disclosure

- Standard Form that Discloses Rater Financial Interest in Home being Rated
 - ☐ Beginning on April 1, 2005, all Raters Must Provide to Their Clients and Providers

www.natresnet.org/standards/disclosure/disclosure_form.pdf

Completing a Rating

☐ New Homes

- Obtain a set of drawings from builder
- Complete a rating of house design from plans using RESNET approved software
- Set target, minimum standard for rated features of home (i.e. max duct leakage, max envelope leakage, minimum quality of insulation, etc.)
- Complete testing and inspections on home during construction
- So long as rated features meet minimum standards set forth by rating, home passes and can be certified when completed/labeled

Completing a Rating

☐ Existing Homes

- Complete on-site inspection to determine
 - ☐ Physical dimensions of home
 - ☐ Water heater size and type
 - ☐ Window size and type
 - ☐ Insulation type, level and quality
 - ☐ Air conditioner and heater size and type
 - ☐ Duct leakage
 - ☐ Envelope leakage
- Using collected data, complete rating of house design by inputting into RESNET approved software
- If software indicates that the house design complies with minimum requirements (e.g. HERS score of 86), home passes and can be certified when completed

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Energy Mortgages

- Energy Efficient Mortgages (EEM's) factor the cost of energy improvements and the value of energy savings into the loan calculations.
- EEM's require a HERS Rating Report
- Energy improvements must be "cost effective"
- EEM's are recognized by Fannie Mae, Freddie Mac, FHA and VA
- Energy **Improvement** Mortgages (EIM's) are exactly like EEM's except for existing rather than new homes.

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Energy Mortgages

☐ EEM's and New Construction

- Energy Star labeled Homes automatically qualify for an EEM
- Builders who pay for the cost of a HERS rating on a new home can offer their own "Energy Star" EEM
- EEM's help to qualify marginal buyers for a new home that they would not have otherwise been able to buy
- Fannie Mae's new "DREEM" mortgage

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FannieMae

Energy Report
For Fannie Mae Desktop Underwriter®

Use this Energy Report to show the Energy Savings (for underwriting purposes in accordance with the requirements of the Energy Efficient Mortgage product) to determine the Energy Savings related to the property. This Report is to be completed by the Energy Rater and submitted to the Lender. This Report must be retained by the Lender in the Loan File.

Borrower Name(s): _____

Property Address: _____ Plan # 542 Phoenix, AZ

Energy Savings

Monthly Energy Savings

Enter Monthly Energy Savings Value into Section V "Monthly Income and Combined Housing Expense Information" in Desktop Underwriter®.

Energy Value

New Homes or Energy Efficient Existing Homes

Energy Savings Value

Enter Energy Savings Value into "Additional Data" in the Desktop Underwriter® screen by adding this value to appraised value.

OR

Energy Improvements to Existing Homes

Energy Savings Value

Enter into Section VII "Details of Transaction". Add to Line B "Alterations, improvements, repairs"

AND

Enter Energy Savings Value into "Additional Data" in the Desktop Underwriter® screen by adding this value to appraised value.

Rater's/Provider's Signature _____

Date _____

REMRate - Residential Energy Analysis and Rating Software v11.2
This information does not constitute any warranty of energy cost or savings.
© 1985-2003 Architectural Energy Corporation, Boulder, Colorado.

Energy Mortgages

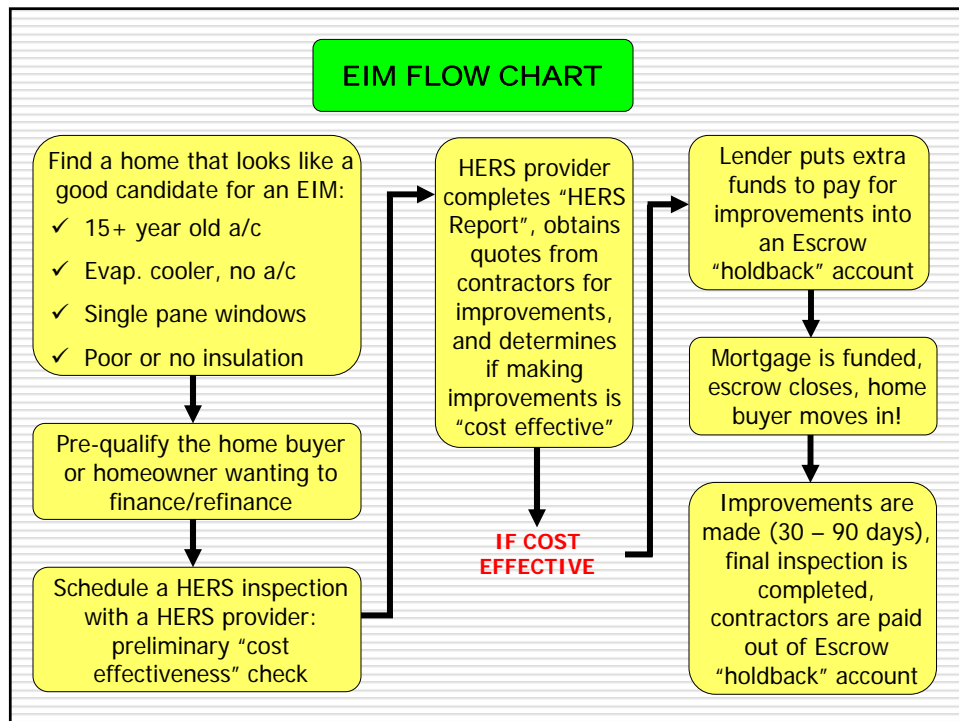
□ EIM's and Existing Homes

- Can be used for purchase or re-finance of an existing home
- Allows home buyer to make improvements to a home immediately after move-in rather than wait for a later time when they have the money
- High interest, zero equity Second Mortgage is no longer required to finance improvements
- Improvement work is coordinated by a professional facilitator using pre-qualified, expert contractors

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Energy Mortgages

☐ Fannie Mae

- Qualify for larger mortgage
 - ☐ Borrowers get the benefit of the energy savings added to their income for qualification purposes
- Finance energy retrofits
 - ☐ Energy improvements to existing homes can be up to 15% of home's value
 - ☐ Finance up to 100% of improvements
 - ☐ Improvements paid over life of mortgage
- Energy value — adjusts LTV
 - ☐ For new construction: appraised value of property plus present value of efficiency improvements
 - ☐ For retrofits: as-is value plus cost of improvements or as-completed value

Energy Mortgages

☐ FHA

- \$4,000 or 5% of the appraised value (whichever is greater) up to a maximum of \$8,000
- No additional down payment on the energy improvements if the improvements have a present value greater than the cost of the energy upgrades.
- FHA maximum loan limits can be exceeded by the energy improvements being financed
- Final LTV may exceed 100% of appraised value when the energy improvements have a present value greater than the cost of upgrades
- All improvements identified by home energy rating as having a combined present value greater than the cost of upgrades

Energy Mortgages

☐ VA

- 100% of the energy improvements subject to the following limits:
 - ☐ Up to \$3,000 based solely on documented costs
 - ☐ Up to \$6,000 provided that the home energy rating projects the reduction in monthly energy savings exceed the increase in the monthly mortgage payment
- No additional down payment on the energy improvements if the improvements can create positive cash flow
- The total loan amount after adding the costs of the energy improvements can not exceed VA loan limit
- Final LTV may exceed 100% appraised value if energy improvement measures have positive cash flow

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Energy Mortgages

☐ Freddie Mac

- No limit on improvement financing if supported by value
- Requires down payment related to the LTV of the base loan which includes energy upgrades
- PITI increases dollar-for-dollar to reflect energy savings
- Can not exceed maximum loan limits
- Energy improvements can be added to market value through a energy rating from a RESNET/NASEO accredited home energy rating system or Addendum to Appraisal Form 70A.
- Loan amount including energy upgrades cannot exceed 95% LTV
- All improvements identified by home energy rating

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Presentation Recap

- ☐ History and Overview
- ☐ Joining the Rating Industry
- ☐ National Home Energy Rating Standards
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- ☐ Completing a Rating
- ☐ Energy Mortgages

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THANK YOU & Good Luck!



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February 27, 2005