

RESNET

Residential Energy Services Network

2006 RESNET Annual Report

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Residential Energy Services Network, Inc.

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*Setting the STANDARD
for QUALITY*

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Introduction

The Residential Energy Services Network, Inc. (RESNET) is a membership driven, not-for-profit corporation. RESNET's mission is to ensure the success of the building energy performance certification industry, set the standards for quality and increase the opportunity of high-quality building ownership.

RESNET supports its mission through two principle goals:

- Setting the standards for quality of rating services thereby enhancing the credibility of ratings to consumers, lenders, the housing industry, government agencies and utilities.
- Providing the tools to help home energy raters succeed in becoming profitable businesses

RESNET is guided by a Board of Directors whose membership includes representatives from the entire home energy rating industry.

2006 RESNET Officers:

President - Kelly Parker, Guaranteed Watt Saver Systems
Vice President – David Goldstein, Natural Resources Defense Council
Treasurer – Lee O’Neal, Nspects
Secretary – Bruce Harley, Conservation Services Group
Immediate Past President – Philip Fairey, Florida Solar Energy Center

Other members of the RESNET Board of Directors:

Ben Adams, MaGrann Associates
Eric Borsting, ConSol
Galo LeBron, Energy Inspectors
Steve Byers, Energy Logic
Richard Faesy, Vermont Energy Investment Corporation
Ken Fonorow, Florida H.E.R.O.
Tom Hamilton, CalCERTS

Michael Holtz, Architectural Energy Corporation
Mark Jansen, Energy Efficient Homes Midwest
C.T. Loyd, The Nelrod Company
Joseph Lstiburek, Building Science Corporation
Greg Nahn, Wisconsin Energy Conservation Corporation
Gayle Sampson, Mid-West Building Diagnostics
Douglas Walter, Kansas Building Science Institute
Daran Wastchak, D.R. Wastchak, LLC
David Wilson, Energy Rated Homes of Utah

To better achieve its goal of setting the standards for quality, the RESNET Board of Directors has established standing committees. Each committee's purpose is to provide the RESNET Board with policy implementation and technical guidance. The committees are:

Quality Assurance and Ethics Committee

Chair: Ben Adams, MaGrann Associates

Members:

Doug Beaman, Douglas Beaman Associates
C.T. Loyd, The Nelrod Company
Eathan MacCormick, TREAT Ratings
Greg Nahn, Wisconsin Energy Conservation Corporation
Lee O'Neal, Nspects
Jonathan Passe, Environmental Protection Agency
Robby Schwarz, Energy Logic
Daran Wastchak, D.R. Wastchak, LLC

Training and Education Committee

Chair: David Wilson, Energy Rated Homes of Utah

Members:

David Eishen, Energy Efficient Green Building Institute
Ken Fonorow, Florida H.E.R.O.
Adam Gifford, Conservation Services Group
Mark Jansen, Energy Efficient Homes Midwest
Tei Kucharski, Energy Gauge USA
Neal Moyer, Florida Solar Energy Center
Kelly Parker, Guaranteed Watt Saver Systems
Richard Simpson, Total Energy Systems
Douglas Walter, Kansas Building Science Institute

Technical Committee

Chair: Bruce Harley, Conservation Services Group

Members:

Skye Dunning, Building Performance Specialists
Philip Fairey, Florida Solar Energy Center
Toben Galvin, Vermont Energy Investment Corporation

Bion Howard, Building Environmental Science and Technology
Michael Lubliner, Washington State University Energy Program
David Meisegeier, ICF Consulting
Jay Murdoch, Owens Corning
Gary Nelson, Energy Conservatory
Duncan Prah, IBACOS
Dave Roberts, Architectural Energy Corporation
Dennis Stroer, Energy Calcs

Membership Services Committee

Chair: Gayle Sampson, Midwest Diagnostics

Members:

Tom Hamilton, CalCERTS

Kathy Jansen, Energy Efficient Homes Midwest

Kristin Shewfelt, E-Star Colorado

RESNET's Priorities for 2006 Adopted by the RESNET Board of Directors

The RESNET Board of Directors adopted the following priorities for 2006 in rank order:

- I. Adopt and Implement Procedure for Verification of the Federal Tax Credit for Energy Efficient Homes**
- II. Ensuring the Quality of Ratings through Quality Assurance Monitoring**
- III. Educate Builder and Rating Industries about Federal Tax Incentives**
- IV. Enhance the Quality of the RESNET National Energy Rater Test**
- V. Advocate for Extension of New Homes and Commercial Building Energy Efficiency Tax Incentives and for the adoption a Performance Based Existing Homes Credit**
- VI. Develop National Standards for Energy Audits of Existing Homes**

This report is divided into two parts:

- Report on achieving 2006 RESNET Board priorities
- Report on other accomplishments in 2006

Report on RESNET Priorities

In 2006 the RESNET Board of Directors adopted six very ambitious priorities.

This decision was made because of the growing concerns over energy prices and global climate change facing our nation coupled with the current opportunities available to the industry with the passage of the Federal energy efficiency tax credits.

- I. **Adopt and Implement Procedure for Verification of the Federal Tax Credit for Energy Efficient Homes** The IRS recognized RESNET's publication "*Procedures for Certifying Residential Energy Efficiency Tax Credits for New Homes*" for verification of the federal tax credit for new homes. RESNET accredited four software programs to calculate homes eligibility for the federal tax credit which resulted in over 10,000 homes qualifying for the credit.

- II. **Ensuring the Quality of Ratings through Quality Assurance Monitoring** With the increasing demand for home energy ratings the issue of quality assurance becomes paramount. It is vital that all rating providers consistently provide quality assurance of their raters. To monitor this, RESNET staff conducted on-site quality assurance monitoring of seven providers in the states of Arizona, California, Colorado, Nevada, Oklahoma, and Virginia.

To achieve a higher threshold of compliance with the RESNET Quality Assurance Standards, the RESNET Board of Directors adopted new procedures to monitor 100% of all active Providers in 2007.

- III. **Educate Housing and Rating Industries about Federal Tax Incentives** A rigorous and expeditious effort to educate the housing and rating industries about the availability of tax credits and procedures for tax credit qualification was imperative to insure that the credit be utilized in 2006. The fact that over 10,000 homes qualified for the credit in 2006 demonstrates the success of RESNET's activities listed below.

Addressing National Conferences Including

- The National Builders Show
- National Association of Home Builders Energy Committee
- The American Council for an Energy Efficient Economy
- National Webcast on Tax Incentives
- Southeast Regional Tax Incentives Forum
- Pacific Gas and Electric Webcast
- HUD Western Regional Housing Forum
- EEBA
- Affordable Comfort
- Structural Insulated Panel Association Conference
- Concrete Insulated Forms Conference
- Cool Roofs Coalition Workshop

- North Carolina Energy Star Conference
- San Diego Regional Energy Office Workshop
- 2006 RESNET Conference
- RESNET Audio Rater Roundtable

Dedicated Page on RESNET Web Site Dedicated a page on the RESNET website on tax incentives for energy efficiency that included FAQ's on the tax credit for builders and raters, complete information on the requirements on each of the tax incentives, and a directory for builders of raters qualified to verify homes for the tax credit.

Articles in Major National Publications Including:

USA Today

- The Wall Street Journal
- The Washington Post

Authored the Tax Credit for Energy Efficient Homes Section of the “Tax Incentive Assistance Programs Report on Federal Tax Incentives” published by the American Council for an Energy Efficient Economy (ACEEE)

- IV. Enhance the Quality of the RESNET National Energy Rater Test**
To ensure a minimum knowledge base for certified raters, RESNET developed and currently administers an on-line national rater test. In the first year of the test, questions were selected and modified from tests previously used by certified RESNET Training Providers. In 2006, the RESNET Training and Education Committee reviewed and revised the test to increase question clarity, consistency in format, and technical accuracy.
- V. Advocate for Extension of New Homes and Commercial Building Energy Efficiency Tax Incentives and for the Adoption a Performance Based Existing Homes Credit**
With RESNET input, legislation was introduced in Congress in 2006, to extend the tax credit for energy efficient homes, enhance and extend the commercial tax incentives and create a performance based existing homes credit. The RESNET Board of Directors endorsed this legislative proposal. During the summer of 2006, RESNET staff and Board representatives met with key House and Senate tax committee staff to educate them on RESNET's goals. The efforts paid off. In December Congress passed and President Bush signed legislation that extended the energy efficient homes tax credit and commercial building deduction through December 31, 2008.
- VI. Develop National Standards for Energy Audits of Existing Homes**
In 2006, RESNET entered into a consensus building process to develop a

national standard for energy audits of existing homes. A large and inclusive task force was appointed representing a broad diversity of opinion and experience with building performance and energy audits. This task force agreed to a process to move toward creation of a national standard. The most significant accomplishments were the development of a framework for the new standard and a definition of terms. There is now a solid foundation for creation and adoption of a standard in 2007.

Accomplishments Achieved in 2006

RESNET staff presented a lengthy list of projects they anticipated accomplishing in 2006 to the RESNET Board of Directors at the annual Board meeting in February 2006. This is a report summarizing the results of those activities.

- A. Advocate that the U.S. Department of Energy (DOE) Adopt the HERS Index to Designate Thresholds for Building America and Net Zero Homes** In July 2006 RESNET presented a proposal to DOE to use the HERS Index to create a label for Building America and Net Zero Energy Homes. This would put all federally sponsored new home initiatives on a common matrix. With input from RESNET DOE is currently developing a National Builders Challenge that would use a national index and thresholds on that index for the labeling Building America and Net Zero Energy Homes.
- B. Develop Sampling Provider Accreditation Standard** A draft Sampling Provider Accreditation Standard was developed and vetted through a public review process in 2005. The proposed standard was presented at the 2006 RESNET Conference where significant issues were identified requiring a revision of the proposed standard. The RESNET Sampling Standard Drafting Committee reviewed these issues, revised the proposed standard and vetted the standard again through a public review process. Based on the public review process, the Committee has forwarded a proposed standard for consideration and adoption by the RESNET Board of Directors in December 2006.
- C. Information Campaign to Explain Technical Changes to the RESNET Standards Effective July 1, 2006** In an effort to increase the level of knowledge among raters about the technical changes to the RESNET Standards, RESNET offered several sessions at the 2006 RESNET Conference, published numerous articles in RESNET Notes, posted notices on RESBlog, sent informative e-mails to rater members and rating providers, conducted an audio teleconference and Rater Roundtables for raters, and posted an informational page on the RESNET web site. The success of RESNET's efforts is clearly demonstrated in a survey of RESNET rater members. The survey showed that 86.2% of raters

responded that they are “aware” of the changes to the technical standards.

- D. Develop Test Suite for Approving Software to Calculate Compliance to the International Energy Conservation Code (IECC)** With funding from DOE through the National Renewable Energy Laboratory, RESNET has developed a test suite for approving software programs to be recognized by code officials for calculating compliance with the IECC. In 2007 the RESNET Board will be asked to adopt the test suite. RESNET has sent to DOE a proposal for publicizing the test suite to building code officials across the nation.
- E. Continue Dialogue with the European Union and the International Energy Agency** At the 2006 ACEEE Summer Study on Energy Efficiency in Buildings, RESNET and the International Energy Agency hosted a workshop on improving the energy efficiency of existing buildings. This session led to the identification of a number of approaches where the U.S. and European Union can cooperate. RESNET has continued to be in contact with the European Union on the implementation of the Energy Performance of Buildings Directive. Representatives of both the European Union and the International Energy Agency will be presenting at the 2007 RESNET Conference.
- F. Adopt New Categories of Rater Certification** In 2006 the RESNET Standards were amended to create the following categories of rater certification: Rating Field Assessor, Certified Rater, and Senior Certified Rater. The National Energy Rater Test has been modified for the testing required for certification of a Rating Field Assessor.
- G. Host the 2006 RESNET Building Performance Conference** The 2006 conference was held on February 27 - March 1, 2006 in San Antonio. The conference not only had the largest attendance to date but created increased revenues over previous years. The effectiveness of the conference is clearly demonstrated in the results of the on-line survey of conference attendees. 89.5% of attendees responded positively on the value of the conference, and 86.5% said they planned to attend the 2007 conference.
- H. Implement the North Carolina ENERGY STAR Homes Program** With funding from the North Carolina Energy Office and EPA, RESNET coordinated an ENERGY STAR Homes paid marketing campaign in the Charlotte and Raleigh/Durham housing markets. The purpose of the campaign was to jump start the demand for ENERGY STAR homes and home energy ratings in the state. This marketing campaign will be followed with media events in a number of the state’s markets in 2007.

- I. Expand Building American Habitat for Humanity Project** With funding from DOE the Florida Solar Energy Center subcontracted with RESNET to assist in their recruitment of certified home energy raters to volunteer their services and provide the home energy ratings required to certify Habitat for Humanity homes as ENERGY STAR compliant. In 2006, an agreement was negotiated to expand the project from targeting specific markets to including all areas of the nation. To assist in the promotion of the project RESNET has devoted a page on the RESNET web site that provides information to raters about how they can volunteer their services.
- J. Enhance Partnership with the Building Performance Institute (BPI)** In 2006 RESNET entered into a Memorandum of Understanding with BPI to coordinate the two programs. This agreement provided an opportunity for home energy raters to participate in BPI's quality assurance review of its accredited contractors. In addition, through this partnership, BPI provided funding to RESNET to enhance its national rater test.
- K. Establish Linkage Between Home Energy Ratings and Green Building Programs** RESNET has entered in to a Memorandum of Understanding with the U.S. Green Building Council (USGBC) to incorporate ENERGY STAR and home energy rating into the USGBC's LEED for Homes Program. In 2006, USGBC used RESNET accredited rating providers for the pilot LEED for Homes project. USGBC is preparing for the national rollout of the LEED for Homes effort and is planning to continue the use of accredited RESNET rating providers.
- L. Adopt RESNET Strategic Planning Framework** In 2006 the RESNET Board adopted a comprehensive strategic planning framework for the organization. This framework included:
- **Vision Statement**
 - **Mission**
 - **Definition of Services Provided**
 - **Definition of Strategic Opportunities**
 - **Goals**
 - **Process Objectives**
- The framework contains a process that leads the organization from a strategic vision to specific objectives through the year 2015 and provides the flexibility for the organization to take advantage of opportunities as they emerge.
- M. Co-authored with the International Energy Agency a Peer Reviewed Paper on Monetizing Energy Efficiency** The greatest long term sustaining incentive for improving the energy performance of buildings is to monetize the savings in the market place. In 2006, RESNET and the

International Energy Agency co-authored a paper on monetizing energy efficiency and presented it at the ACEEE Summer Study on Buildings.

- N. Implement 2006 RESNET Rating Industry Leadership Awards Program** To recognize leadership in the rating industry the RESNET Board of Directors established the Rating Industry Leadership Awards. At the 2006 RESNET Conference the following awards were presented:
- Market Transformation Leadership Award – *Southwest Gas Corporation*
 - Program Leadership Award - *Texas Veterans Land Board*
- O. Develop a Web Site Resource Tailored to Assist Raters in Marketing Their Small Businesses** As a result of numerous workshops offered throughout the nation by RESNET staff over the past three years on how to effectively market a small rating business, RESNET staff developed a web site resource page which presents the concepts and resources offered in the course for use by RESNET rater members.
- P. Develop Prioritized List of Potential New Services for Home Energy Raters** A key goal of the RESNET Strategic Planning Framework is expanding the services that certified raters provide other than the rating of homes. In 2006 RESNET staff presented a prioritized listing of potential new services to the RESNET Board of Directors.

Additional Accomplishments Achieved in 2006

In addition to the lengthy list of projects RESNET staff presented to the RESNET Board of Directors, staff accomplished the following in 2006.

- A. RESNET Financial Stability** The Strategic Planning Framework adopted by the RESNET Board in 2006 identified RESNET achieving financial stability as the top strategic opportunity for the organization. In 2006 RESNET was able to be achieve this financially stability without dependence on outside one-time grants or contracts.
- B. Environmental, Capacity Value and Energy Efficiency Certificate Trading** With the softening of the new housing market there is a clear need to expand the range of business opportunities for the building performance rating industry. A dynamic opportunity to diversify the industry is the monetizing of building energy savings through environmental and energy efficiency trading. Because of the importance of this opportunity the RESNET Board of Directors tasked the RESNET Executive Committee to develop a plan of action for this initiative. This plan of action was accepted by the RESNET Board of Directors in November 2006.

C. Increasing RESNET Rater Member General and Professional Liability Coverage Prior to 2004 the rater industry was woefully underinsured for the liabilities inherent with rating services. Raters were unable to obtain an insurance policy tailored to their profession or were only offered policies at premium prices. In 2004 RESNET negotiated a rater insurance plan for its members. In 2006 RESNET staff undertook an aggressive effort to educate its members about the need for and availability of insurance. The success of this effort is apparent in the results of a survey of raters which showed:

- over 91% of raters belonging to RESNET carry general liability coverage while only 76% of non members have coverage
- 62% of raters belonging to RESNET carry professional liability coverage, while only 46% of non-members have coverage.

D. Streamline Rating Provider Accreditation Review Process Previously the review process for RESNET Rating Providers required a lengthy two step process including approval by a state energy offices committee and a mortgage industry review committee. In 2006 this process was streamlined and now requires RESNET staff review and the approval by the RESNET Quality Assurance and Ethics Committee resulting in a much speedier review.

E. Adopted Amendments to the National Home Energy Rating Standards In 2006 the following amendments were adopted:

- Rater Categories of Certification
- Rating Provider Disciplinary Action
- Revising Index Scores for Rating Star Designation
- Rater Training Provider Accreditation Process
- Standard Editorial Corrections
- Quality Assurance Designee Designation
- Rating Provider Accreditation Process

All of these amendments had to undergo a formal public review and comment process.

In addition, the RESNET Board adopted interpretations to the standards. These included:

- Shelter Classification and Rating Software Programs
- RESNET Duct Testing Procedures
- Ventilation Fan Energy Use
- Mechanical Ventilation and Infiltration Rates in Rated Buildings
- SEER Rating for Evaporative Coolers in Hot and Dry Climates

F. Revised Format of RESNET Home Energy Rating Standards Prior to 2006 each of the chapters of the RESNET standards had a different

format. In order to bring consistency to the standards and to bring them closer to resembling the ANSI standards, RESNET staff reorganized the standard into a consistent format. This format when viewed on a computer provides an automated index and automated book marking abilities.

- G. RESNET Web Site Directory Database** Before 2006 RESNET's member directories could only be modified on an intermittent basis and had to be preformed by RESNET's web master. This was inefficient and expensive. In 2006 RESNET staff automated this process. Updates can now be made in real time and with minimal expense.
- H. Rater Audio Roundtables** In order to improve RESNET's transparency and communication to raters RESNET has established a monthly rater audio roundtable. Each month RESNET hosts a forum led by RESNET Board President Kelly Parker on timely topics for the rating industry. These forums are inexpensive and have proven to be well attended, and an effective means of informing raters and answering questions.
- I. RESNET Financially Supports EEBA Houses That Work Education Seminars** EEBA has developed a seminar on the lessons learned from the Building America program called Houses That Work. These seminars take place annually in every region of the nation and attract builders. In 2006 RESNET provided funding to EEBA to allow RESNET rater members to attend these seminars at a 50% discount. This provides raters another avenue to meet energy efficient builders in their market.
- J. RESNET Procedures for Certifying Residential Energy Efficiency Tax Credits for New Homes** It was the RESNET's interpretation that the normalized loads method be used for calculating energy use for verification of the tax credit . In May 2006 it was discovered that this created problems with homes heated with gas and cooled with electricity in cooling climates. On June 1, 2006 RESNET adopted a subsequent publication, 06-001, which incorporated the modified normalized loads method. As a result of RESNET's coordination with organizations including DOE, IRS, and the National Association of Home Builders, the IRS announced on Oct 29, 2006 that either of the RESNET calculations can be used for certifying homes for the tax credit.
- K. Liaison and Advocacy With the Environmental Protection Agency (EPA)** Labeling of ENERGY STAR homes is currently the single largest business activity of the home energy rating industry. Because of this central economic concern, a key responsibility of RESNET is to act as a liaison between and advocate for the home energy rating industry and the EPA. In 2006 RESNET was involved in discussions and negotiations with the EPA on the following issues:

- BOP Thresholds in Climate Regions 1 and 2
- Reference Building for Attached Housing
- Testing and Verification Procedures for Modular Homes built in HUD Code Home Manufacturing Plants
- Air Tightness and Inspection Procedures for SIPs
- Transition Period for the Thermal Bypass Checklist
- Modification of the Thermal Bypass Checklist
- Modeling of Program Threshold Scores

L. Increased National Visibility Spiraling home energy costs and heightened concern about global climate change has renewed the media's interest in energy efficiency. In 2006 RESNET staff took advantage of this opportunity and aggressively worked with the national media. This resulted in coverage by such premier national outlets including:

- **Newsweek Magazine**
- **The Wall Street Journal**
- **New York Times**
- **Los Angeles Times**
- **Washington Post**
- **Chicago Tribune**
- **Money Magazine**
- **Smart Money Magazine**
- **Better Homes and Gardens**
- **ABC News website**
- **Solar Today**
- **Real Simple**
- **The Home Inspector Journal**
- **Home Energy Magazine**

In addition RESNET's web site was listed in Al Gore's book, An Inconvenient Truth. This national attention has created greater activity on RESNET's web site. The number of visits to the web site increased from an average of 91,404 per month in the first quarter of 2006 to 124,880 visits per month this past quarter. This represents a 36.5% increase in traffic in the past six months.

M. Increase in RESNET Membership 2006 has witnessed a dramatic increase in membership. Through on-line evaluations of memberships we have determined that this increase is being driven by:

- RESNET's Effectiveness on Serving as the Voice of the Rating Industry
- Value of Member Benefits
- Effectiveness of RESNET Communications to its Network

- RESNET's Heightened National Visibility

RESNET's membership increased by 100% in 2006 as we welcomed 244 new members.

- N. Trademark Protected "RESNET"** With the growing success and credibility of RESNET it had become vital that the integrity of the brand name of RESNET be protected. In 2006 RESNET was granted approval for the exclusive rights to "RESNET, Residential Energy Services Network" by the U.S. Trademark and Patent Office.