



Setting the Standards for Home Energy Efficiency

Approved RESNET Board of Directors Meeting Minutes March 14, 2023

Board Members Present	Board Members Absent	Staff Present
Sandra Adomatis Jacob Atalla Lindsey Elton Matt Gingrich Emelie Cuppernell Glitch David Goldstein John Hensley Leo Jansen Mark Johnson Cy Kilbourn Abe Kruger Chris McTaggart Robert Pegues Curt Rich Jonathan Risch Brian Shanks Clayton Traylor	David Beam Philip Fairey	Steve Baden Emma Bennett Carl Chidlow Christine Do Scott Doyle Laurel Elam Billy Giblin Clara Hedrick Cardice Howard Ryan Meres

Call to Order

The meeting was called to order by RESNET Board President Mark Johnson at 9:31 a.m. Eastern Time.

Introduction of New Board Members: Sandra Adomatis, Leo Jansen, and Robert Pegues

Mark Johnson introduced and welcomed the new RESNET board members.

Roll Call

Christine Do, RESNET Staff, on behalf of Philip Fairey, RESNET Board Secretary, called the roll and a quorum was present.

Approval of Meeting's Agenda

Brian Shanks made a motion to approve the meeting agenda. Emelie Cuppernell Glitch seconded. The motion passed by voice vote.

RESNET Anti-Trust Policy

Curt Rich reviewed the anti-trust policy for the Board, which was included in the briefing packet that was distributed to Board members prior to the Board meeting.

Approval of January 17, 2023 Meeting Minutes

David Goldstein made a motion to approve the January 17, 2023, meeting minutes that were included in the meeting packet. Cy Kilbourn seconded the motion. The motion passed by voice vote.

Presentation of 100,000 HERS® Rated Homes Club to BER

RESNET Executive Director Steve Baden presented this the recognition to Chris McTaggart and Eurihea Speciale for the BER being initiated into the RESNET 100,000 HERS Rated Homes Club. Chris and Eurihea expressed their gratitude for the recognition.

Remarks from Faith Williams, Legislative Director, Congressman Mike Levin (D-CA)

Faith Williams, Congressman's Legislative Director, discussed the Congressman's priorities and the experiences that the office has had in the initiation, execution, and implementation of the bill pertaining to the Department of Veteran Administration (VA) Home Loan program. She stated that the legislation called for the VA to form an advisory committee to guide the agency in developing the rules and the implementation of the new law.

Steve Baden presented a plaque to Ms. Williams in recognition of the legislative leadership that Congressman Levin demonstrated for energy efficient homes for the nation's veterans.

Chris McTaggart asked about the implications of the new legislation would have for RESNET's membership. Steve responded that the legislation was the first to be enacted into law that would recognize the energy savings of an energy efficient home in the mortgage loan. He pointed out that the legislation specifically calls for reports submitted by RESNET HERS Raters.

Mr. Baden stated that there should be a significant increase in home-buying power for veterans because of this legislation. Chris McTaggart informed the Board that a published list from the federal government states that 105k VA loan transactions have taken place in Q1 2023. Chris offered to share more statistics to help the formation of public information tool around this subject.

Chris inquired about further action to be taken by RESNET to take advantage of the opportunity with this legislation such as marketing or other programming and implementation of this new opportunity. He suggested that a one-page factsheet or infographic be develops with basic information on the changes to the VA Loan Program. Leo suggested creating a roadmap or outline to outreach the new opportunities in this legislation to the RESNET community. Steve cautioned that the VA would first have to determine how the legislation will be implemented before seriously marketing the program.

Brian Shanks asked about how the advisory committee will be convened. Curt Rich responded that traditionally, there will be a call for committee members through the federal registry. Steve also emphasized it was too soon to tell but that Carl Chidlow, RESNET's Washington Representative, will be communicating with the Veterans Administration on this.

Outreach Plan for RESNET Network to Take Advantage of Opportunities of Expansion of HERS Index Option in State Energy Codes and Recent Congressional Legislation

Steve Baden and RESNET's Washington Representative Carl Chidlow provided an overview of the legislation recently enacted by Congress that will channel billions of dollars to the states to improve the energy efficiency of homes. Steve also pointed out the recent legislation passed by the Texas Legislature that created a HERS Index compliance option to the state's energy code. This legislation increased the number of homes HERS rated in Texas by 19% in first year of its implementation.

Carl and Steve pointed out that in these developments there is a clear opportunity for growth of business opportunities for certified RESNET HERS Raters. To take advantage of these opportunities HERS rating companies needed to have their voices heard at the state level.

Carl and Steve then outlined what RESNET could do to assist RESNET's rating community in advocating at the state level. They suggested the following elements:

- RESNET create an online toolkit for HERS Raters to be able to share this information and advocate to their state energy offices. HERS Raters and Software Providers would provide the projected cost savings and other metrics from HERS Rater reports to be present as data to their state organizations.

Chris McTaggart stated that outlining a standard process for these reports for Raters is a good starting point to ensure consistency.

Carl Chidlow stated that the funds are specifically meant to support low-income housing which can introduce another variable to this process.

Steve stated that RESNET's role could be to enable Raters to perform these reports and have them officially recognized by the state. Curt Rich added that state outreach and engagement is key to this project.

- Creation of a RESNET state advocacy strike force.

Steve stated that if this strategy is pursued, funding from the RESNET Board would be necessary. The effort would create criteria and a selection process by which it could be determined where RESNET would pay Carl, Steve or other parties to go into a state and work with the coalition in educating decision makers on the opportunity that HERS Raters can play in properly implementing the new programs.

States that are already primed and interested in this can be initial outreach efforts. Texas is one of these states. Large builders like LBA and other organizations can assist in a practical way, as opposed to only relying on HERS Raters to carry the effort. Board members agreed Raters cannot accomplish this without support from partner organizations.

Brian Shanks asked for clarification that this project is separate from existing pathways with IECC code.

Curt Rich expressed concern that a HERS Index option could undermine the soon to be adopted 2024 IECC and that states could set HERS thresholds less stringent than the IECC.

Mark Johnson confirmed that the slight difference in targeted goals can allow for other avenues of action with states. Incorporating QA procedure can prevent the misconception that this proposed pathway is less stringent, or a workaround to existing code. RESNET has already laid out efficiency targets in the state of Texas, allowing builders to plan for those targets and thresholds.

There was an agreement that in its advocacy, RESNET would also advocate the adoption of the 2024 version of the IECC and that proposed HERS Index pathway be as stringent as the IECC.

Board members generally agreed that this is a project worth beginning action on. Steve and Carl will begin work immediately.

Outlook for 2023

Steve Baden gave an update on RESNET's outlook for 2023.

Steve stated that 2023 would provide uncertainty due to the effects that inflation and mortgage interest rates will have on the housing market. Steve stated that RESNET staff is closely monitoring HERS rating activity to detect trends. He stated that RESNET staff would continue to send to the Board a monthly report on rating activity.

Steve stated that while he is aware of the potential challenges the year could bring, he was bullish on the state of the organization and the industry. This optimism is driven by the following emerging opportunities:

- The amended and extended 45L federal tax credit
- The Fannie Mae & Freddie Mac green bond mortgage backed securities
- Builder ESG reporting
- Partnership with Texas Association of Builders on Education Campaign on HB 315
- The RESNET Carbon Index
- HERS_{H20}® Index
- The emerging Build to Rent Market
- Structured Finance ESG
- RESNET HERS Ratings coming to California

Mr. Baden also gave an overview of how RESNET staff planned to be more proactive in its quality assurance overview. He stated that RESNET's 2023 efforts would focus on:

- Addressing current "Fires" - problems that are currently been identified
- Putting out future fires early and not waiting until conflagrations
- Detecting "smoke" and addressing before becoming fires
- Staying "Ahead of the Story"

RESNET's efforts will expand from relying on compliance complaints to other factors triggering investigations, RESNET's QA Team will expand its effort to include:

- Tips received from monitoring and unsolicited communications
- Discoveries through quality assurance monitoring
- Analytics through updated RESNET National Registry and new automated QA online tool

Steve stated that with the challenges presented with the revised 45L tax credit program RESNET staff needed flexibility to address potential problems earlier rather than aiming at internal goal numbers.

Abe Kruger inquired how analytics have changed from the past tool, QA Genie to the new tool, Kibana. Christine Do of RESNET staff outlined the new analytical process in Kibana which includes identifying trends before they develop into systemic problems.

Robert Pegues inquired about prevention opportunities in Kibana. Scott Doyle of RESNET staff confirmed that these type of prevention measures are mechanically possible, though the staff time to implement this oversight is not available at this time. Due to increased federal involvement in RESNET programming, preventing quality assurance problems is a higher priority than ever.

Chris McTaggart commented that a system that relies more on quality assurance verification as prevention could mitigate QA issues. Steve stated that the discovery segment of the evolved quality assurance effort will be a verification/validation process like Chris suggested. In addition having Providers have access to Kibana for their ratings will help in create a better quality management process.

Mr. Baden also reminded Board members that the main responsibility for much of the quality assurance process is with the accredited Rating Quality Assurance Providers.

Jonathan Risch suggested taking another look at the quality measures already incorporated into the process and ensure they are sufficient. This could also be a feasible prevention measure. Though there are these type of verification measures present in current procedures, Jonathan believes more could be done.

Emelie Glitch was concerned over a potential administrative overload of Providers.

Brian Shanks stated that heavy quality assurance involvement in verification or post-rating audits could affect the homeowners. Clayton Traylor agreed that the impact to the homeowner should be a chief concern.

Abe brought the possibility of an annual quality assurance report to serve as a feedback loop.

EPA ENERGY STAR Program and 45L Federal Tax Credit

Jon Passe of EPA ENERGY STAR for New Homes Program outlined all of the known facts surrounding this legislation for the Board. The program is tied to meeting ENERGY STAR program requirements, but not specifically certification of ENERGY STAR. Jon stated honestly that the IRS would have to resolve this.

Jon discussed the different dates cited in the legislation such as acquisition date, closing date, certification date, etc. Jon confirmed that many of those clarifications are only questions to be answered by the IRS.

It is not certain yet which specific versions of multi-family or single-family modeling will be accepted by the IRS. Mr. Passe stated that it is clear that the IRS will provide guidance that will lead to these questions being answered through upcoming interpretation requests. He explained the complication that the IRS is facing in that the agency received over 4,000 responses to its Request for Information that is released soon after the legislation was passed. Regular conversation between EPA and IRS is occurring regarding these questions and related concerns.

Jon stated that questions about tracking, reporting, accountability, and other similar issues are also priority issues of the IRS. Guidance from the IRS is expected no earlier than summer 2023, and will likely pertain to the previously mentioned topics.

Concern over the lack of oversight or potential fraud resulting from older versions of 45L is present, but Jon believes that this new 45L development will successfully address all of those concerns. Pressure to deliver certainty about ENERGY STAR Certifications will also successfully address some of these related concerns.

Mr. Passe stated that collaboration with RESNET on 45L would include accountability and transparency. This could be ensured by unique certification numbers stored in a federal database.

A new API will be sent to the RESNET Registry to allow providers/Raters to select certified EPA builders so the data matches on the EPA side. Again, this will be further discussed by the IRS, EPA, and RESNET to identify improvements to provide consistent and reliable information to builders and other stakeholders.

Finally, Jon identified potential solutions including collaborating with HCOs.

He stated that the EPA is not currently tracking single family addresses certified with ENERGY STAR. They only track addresses for multi-family homes. Currently, there is a search tool ([hersindex.com](https://www.hersindex.com)) that allows interested parties to verify HERS Rating and EPA Certifications. He said that the IRS may require EPA to receive home addresses.

Abe Kruger inquired about what new quality assurance measures would be required. Jon replied that EPA would propose a basic draft or framework for minimum requirements for all HCOs to follow. This will go for review by RESNET.

The EPA is not at this time the interpreter or arbiter of ambiguous interpretation in the legislation. Because EPA is a federal agency, this would be at the IRS's discretion.

DOE Zero Energy Ready Home (ZERH) Program

Eric Werling of the U.S. Department of Energy gave highlights of the DOE ZERH Program including how it functions and its key factors. He stated that DOE added the electric readiness provision recently. He reported that ZERH has seen much progress and use with builders.

Eric reported that the IRS is still deliberating and will release more information as available.

DOE is developing infrastructure for a smooth implementation process for Raters without compromising quality assurance minimum requirements is a priority of DOE as well as improving documentation, speed, and other logistical factors with ZERH.

Beginning in 2024, Version 2 is required for anything acquired after 2023.

Brian Shanks shared concerns around HERS Rating software not being up to date with these new DOE program requirements.

Brian also expressed the issue of the acquisition date of a home. Eric stated that the acquisition date requirement is listed in the legislation and therefore cannot be changed. Eric is interested in discussing possible solutions with interested parties offline.

Eric proposed the DOE provides some ballpark target numbers for all different climate zones in the country so providers can begin using those thresholds until software catches up.

More information on these topics can be found on the DOE Website.

Eric reiterated that much more guidance will come from the IRS in the future. Eric requested that RESNET encourage its network to submit their questions to the DOE to help them better understand exactly where the main points of confusion exist in the program. DOE can answer a number of implementation questions depending on if it falls under IRS guidance or DOE. Until DOE's HCO approval is complete, DOE will recognize EPA approved HCOs.

Documentation is a key part to streamlining DOE HCO approval. The IRS is building a database of all VINs that qualify for the energy efficient vehicles, proving they are aware that verification of requirements is essential for similar tax credits such as 45L and ZERH. Whatever database or verification system is implemented for the IRS, it can be modeled similarly to this example.

A verification process and certification system for ZERH is still to be developed ideally by RESNET, EPA, DOE, and other stakeholders in collaboration.

Eric concluded with reminding the group that there is much work to be done, and RESNET/DOE would be happy to facilitate a virtual meeting to answer more questions and discuss ZERH.

Building Talent Foundation (BTF) Update on Collaboration with RESNET

Branka Minic of BTF stated that BTF's primary goal is to create a sustainable workforce in residential construction. Branka outlined the problems that lead to an unhealthy and underperforming workforce.

Their job search tool, "JobsToBuild", is a matchmaker between job seekers and employers in construction trades. BTF sees an 85% retention rate in their job placements.

Branka stated that RESNET and BTF have entered into a recent Memorandum of Understanding (MOU), RESNET now has a page on BTF's site to promote HERS Rater and RFI training and jobs.

Jobstobuild.com is where jobs can be posted – it only takes a moment to register. BTF currently targets 20 markets, but other markets not originally considered can be incorporated if the funding is present from partners in the area.

Recommendation of the RESNET Embodied Carbon Advisory Committee on Pursuing the Development of a RESNET Standard

At its meeting in Austin, Texas, the RESNET Board formally voted to form an advisory committee to look into embodied carbon emissions by residential construction materials and make a recommendation to the RESNET Board at its next in-person meeting on whether RESNET should pursue developing a standard on calculating residential construction embodied carbon emissions. An advisory committee composed of over twenty members representing a wide range of interests was recruited and Chris Magwood of RMI was appointed as the chair of the committee.

Chris stated that the industry already looks to Raters and RESNET for more on decarbonization. Chris shared data showing the variation in presence of embodied carbon in Canada and the US.

He discussed the importance of RESNET Carbon Index and what is currently missing is a way to calculated embodied carbon. in the advisory committee's considerations while they continue to investigate.

Mr. Magwood gave a presentation on the issue. He stated that there is currently a starting place for the advisory committee, and this is Natural Resources Canada's (NRCan) example, which has developed estimation software with calculation methodology. Chris discussed the current methodology.

Chris then stated that the advisory committee unanimously voted to recommend to the RESNET Board that RESNET start the process of adopting an embodied carbon calculation standard for residential building materials.

The Board discussed what the workflow would be like for the advisory committee to move forward on its recommendations. ISO standards were discussed as an alternative, but after consideration, this route was found to be onerous.

Curt Rich emphasized that there was a further need to understand where RESNET stands as an organization and how its efforts can fit into other work that has previously been done and is currently done, by other organizations and entities on this matter.

Steve clarified that the discussion is about beginning the ANSI standard process and staking RESNET's name on it.

Clayton suggested a potential workflow to move forward:

- Proposed scope for calculations
- That way, the board can apply a feasibility analysis to see if a standard exists and if it is achievable in the real world
- Further consideration needs to be given to the members of the advisory group as the process develops:
 - Technical expertise
 - Builders
 - Supply chain involvement

Cy Kilbourn moved that the RESNET Board direct RESNET Staff to pull a PINS to begin the ANSI standard process for developing a methodology of calculating embodied carbon. John Hensley seconded this motion. The motion passed by voice vote. Chris McTaggart abstained.

David Goldstein then moved that:

- A) RESNET Staff be authorized to pull a PINS within 45 days after review by the RESNET board to begin the ANSI standard process, and
- B) Scope of work for the RESNET project to develop a methodology of calculating embodied carbon,
- C) Allow the advisory committee to move ahead with creating calculation methodology considering what is happening in California and EPA.

Emelie Glitch seconded the motion.

After further discussion, David Goldstein withdrew his motion. Emelie agreed to the withdrawal.

Emelie made a motion for the advisory committee to move ahead with investigating scope and guidelines for the creation of calculation methodology considering what is happening in California and the EPA, and report on its findings prior to further standards development action. Cy seconded the motion.

Brian Shanks proposed an amendment to the above motion to add “prior to further standards development action”. Emelie and Cy accepted this as a friendly amendment.

The motion passed by voice vote. Chris McTaggart abstained.

David Goldstein further emphasized the importance of putting a PINS for a standard through the ANSI process to extend RESNET’s reach to retrospective or operational-based processes as well.

After discussion, the board agreed that RESNET staff will develop a scope of work and the board will review via electronic review.

Proposal to Amend RESNET HERS_{H2O} Guidelines to Address Small Yard Sizes

Jonah Schein of the EPA Water Sense Program and Ryan Meres of RESNET staff addressed the problem that the RESNET HERS_{H2O} is having with homes with small yard sizes.

Jonah stated that townhomes with small lots were not able to achieve WaterSense due to the small size of the lot. He clarified that this issue is not a large-scale problem but does affect the program’s applicability to some homebuilders.

This provision has led to problems in the HERS_{H2O} program execution. The reason this needs the board’s approval is because the HERS_{H2O} Program is currently operating under board-approved implementation guidelines (*Implementation Guidelines for HERS_{H2O} and WaterSense Labeled Homes, V2*—approved November 18, 2021.)

The recommendation is to change the lot size constraint from a minimum to a maximum to allow homes with small lots to be treated more accurately.

Jacob Atalla made a motion to update RESNET’s HERS_{H2O} Implementation Guidelines to address the unintended / unfair penalization of water use in homes with small lots. Brian Shanks seconded.

Abe Kruger asked the committee to provide an estimated adjustment for homes affected until this problem in the standard is fixed.

Mark Johnson inquired about forming next steps. Ryan Meres confirmed that making an interim change to the calculator will allow the committee to ensure their changes are correctly solving the problem.

The motion passed by voice vote.

EPA WaterSense Program Update on the Collaboration with RESNET

Jonah Schein gave an overview of the WaterSense program and its relationship with its HCO partners. Jonah emphasized the impact of the water crisis and drought across the country. An example of this is a reluctance for some water districts to allow the building of new homes unless builders can commit to the WaterSense programs.

The increase in water/sewage cost is due to poor infrastructure in addition to drought. Jonah has seen much success and less water use in the field in requiring builders to use the WaterSense program.

RESNET's role in this effort to decrease water usage in residential homes and construction is to use this data to create incentives through its HERS_{H20} program. Jonah believes that water districts already have many of the tools to easily implement this.

Changes to software to accommodate updates would require changes to the standard. If WaterSense and HERS_{H20} see more activity, more incentives are possible.

Jonah stated that he sees RESNET as a critical WaterSense collaborator and even though there are other program HCOs looks forward to continuing to collaborate with RESNET.

He stated that at the beginning of the process to develop the new version of WaterSense, he made it clear that there would be competition but that EPA would ensure that the program delivery quality would improve not be reduced by the new players.

Leading Builders of America (LBA) Update on Collaboration with RESNET

Clayton Traylor of LBA stated that the priority of LBA is alignment between tax incentives, energy code compliance, green mortgage incentives, and utility incentives. Clayton also would encourage the group to educate builders on exactly what compliance requires for all the above incentives and credits.

Clayton outlined other priorities of LBA and where the organization stands on recent changes to codes and standards, as well as the challenges the association faces such as infrastructure failings of electrical transformers.

He concluded his presentation by stating that LBA has a strong commitment to its partnership with RESNET and working with RESNET's Executive Director Steve Baden.

International Code Council (ICC) Collaboration with RESNET

Mark Johnson of ICC gave an overview of ICC and RESNET's relationship, and how the organization is resolving the issue of ensuring compliance with energy standards while the building code industry is facing workforce difficulties.

Mark also outlined other collaborations with organizations on standards or code projects. There has been a recent increase in the use of RESNET/ICC joint membership, leading to special opportunities for those involved.

Future goals of the IECC include developing standards, building a portal for 405 Compliance, and other goals.

Appraisal Institute Collaboration with RESNET

Sandra Adomatis of the Appraisal Institute gave an outline of the history of RESNET's relationship with the organization. Sandra asked for additional disclosure of addresses holding HERS Rating, ZERH, and DOE for their projects from RESNET, DOE, and EPA.

Sandra reported that there is a high demand for HERS Rated homes, and her organization always advocates for ensuring HERS Ratings are present or negotiating for a different price if it's not.

Jonathan Risch inquired about how the Appraisal Institute assesses existing homes as opposed to new homes. The group all agreed that there is a large opportunity for HERS ratings in existing homes, especially post-renovation and that this benefits both RESNET and the Appraisal Institute.

Sandra reiterated that public access to this data is key to her appraisers.

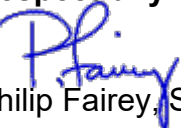
New Business

Carl Chidlow presented Steve Baden with a Red-Line award from Congressman Levin Offices of the VA Loan legislation.

Adjournment

Abe Kruger made a motion to adjourn. Meeting adjourned at 5:08 p.m. Eastern Time.

Respectfully Submitted,


Philip Fairey, Secretary