



Newsletter / December 15, 2025

## Q4 2025: Market Research + Evaluation

### Introduction

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Greetings readers,

*After serving as a NEEA Market Research & Evaluation (MRE) Scientist for the past six years, I am thrilled to share that I have moved into a new role as the Manager of our fantastic MRE team.*

*The MRE team is wrapping up a number of market research, evaluation, and baseline/assumption reviews in late 2025 and early 2026. This includes two market research studies conducted for NEEA's Commercial HVAC product group – Energy Recovery Ventilator/Heat Recovery Ventilator (ERV/HRV) Ownership and Maintenance Market Research and Gas High Efficiency Dedicated Outdoor Air System (DOAS) Specifier Market Research. Our Retail Product Portfolio (RPP) program will publish its third Market Progress Evaluation Report (MPER) along with a High-Performance Clothes Dryers Naturally Occurring Baseline & Key Assumptions Review. In support of NEEA's Codes team, we have published the most recent Oregon Residential Code Compliance Evaluation, and a Codes Baseline and Assumption Review. Finally, be on the lookout for the eighth Heat Pump Water Heater (HPWH) MPER and a Key Assumption Review for NEEA's Luminaire Level Lighting Control (LLLC) program in early 2026.*

*Wishing you a happy and healthy new year!*

*~ Meghan Bean, Manager, Market Research & Evaluation*

#### **For Questions:**

Meghan Bean, MRE Manager  
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### ***PROJECT STAGE DEFINITIONS***

MRE projects can develop rapidly, spanning more than one stage in each quarter that is reported on in the newsletter. In cases where multiple stages are anticipated, we categorize the project in the furthest attainable phase for this quarter.

- *PLANNING: MRE projects from inception through proposal selection*
- *FIELDING: MRE projects from kick-off through the completion of field work*
- *REPORTING: MRE projects in the analysis/synthesis stage through report posting*

## Integrated Systems (HVAC, Lighting, Motors)

### ERV/HRV Ownership and Maintenance Market Research

Kirstin Moreno

**Product Group:** Commercial HVAC Product Group

**Project Stage:** REPORTING

<b>Description</b>	<p>Both of NEEA's commercial HVAC programs (Efficient Rooftop Units and High-Performance HVAC) rely on Energy Recovery Ventilators and/or Heat Recovery Ventilators (ERV/HRVs) as key components that contribute significant energy savings. There are some concerns in the market that this equipment is complicated or time-consuming to maintain and clean, which is a potential barrier to wider adoption.</p> <p>To investigate the real-world experience of owning and caring for ERV/HRVs in commercial HVAC applications, the market researcher is conducting and analyzing six-eight field observations of ERV cleaning/maintenance sessions and 12-15 in-depth interviews with market actors, such as manufacturer representatives, building owners, facilities managers and service contractors.</p> <p>Fuel Type: Electric (High-Performance HVAC)</p> <p>Fuel Type: Gas (Efficient Rooftop Units)</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Gather perspectives on operational considerations for installing, commissioning, cleaning, and maintaining ERVs/HRVs.</li><li>• Investigate what ERV/HRV cleaning and maintenance looks like in real-world applications.</li></ul>
<b>Timing</b>	<p>The project kicked off in Q3 2025 and will conclude in Q1 2026.</p>
<b>Third-Party Contractor(s)</b>	<p>MarketWise Advising, LLC</p>

## Integrated Systems (HVAC, Lighting, Motors)

### Market Progress Evaluation Report (MPER) #1

Meghan Bean

**Program:** Advanced Heat Pump

**Project Stage:** FIELDING

<b>Description</b>	<p>NEEA is conducting the first Market Progress Evaluation Report (MPER) for the Advanced Heat Pump program. The evaluation contractor will review secondary documents, conduct in-depth interviews with key market actors including manufacturers, market influencers, and participants in federal rule-making processes, and analyze the program progress to date.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Document the strategies and activities the Advanced Heat Pump program is pursuing for each of the efficiency improvements the program is targeting.</li><li>• Document the status of key market progress indicators (MPIs) identified by NEEA.</li></ul>
<b>Timing</b>	<p>This work kicked off in Q4 2025 and will conclude in Q3 2026.</p>
<b>Third-Party Contractor(s)</b>	<p>Michaels Energy</p>

## Integrated Systems (HVAC, Lighting, Motors)

### Installation Contractor Market Research

Meghan Bean and Anu Teja

**Program:** Advanced Heat Pump & Dual-Fuel Residential HVAC

**Project Stage:** FIELDING

<b>Description</b>	<p>NEEA is conducting market research with residential HVAC installation contractors to inform strategy for the active Advanced Heat Pump program and the Dual-Fuel Residential HVAC program, which is currently in Program Development.</p> <p>Fuel Type: Dual-Fuel</p>
<b>Research Objectives</b>	<p>Conduct HVAC installer focus groups to gather in-depth, qualitative information on the following topics:</p> <ul style="list-style-type: none"><li>• Descriptions of the typical heat pump selection and sales processes, addressing dual-fuel, single-speed, and variable-speed configurations, including communication with purchasers/end-users.</li><li>• Installers' attitudes toward and decision-making regarding installing supplemental heat in centrally ducted heat pumps.</li><li>• Installers' commissioning practices for heat pump installations.</li><li>• Which features, if any, installers would value in a new connected commissioning product.</li></ul>
<b>Timing</b>	<p>This work kicked off in Q4 2025 and will conclude in Q2 2026.</p>
<b>Third-Party Contractor(s)</b>	<p>Evergreen Economics</p>

## Integrated Systems (HVAC, Lighting, Motors)

### Market Progress Evaluation Report (MPER) #2

Kirstin Moreno

**Program:** High-Performance HVAC

**Project Stage:** PLANNING

<b>Description</b>	<p>NEEA's High-Performance HVAC program seeks to transform the market for very high efficiency dedicated outside air systems (DOAS) for electrically heated commercial buildings across the Northwest region. This study is the second evaluation of the program's Market Transformation efforts.</p> <p>The Market Progress Evaluation Report will entail expert review of educational and marketing materials, surveys with NEEA trainees, HVAC designer interviews, designer surveys, a web scan and web traffic review and document review.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Assess Market Transformation progress as measured by program market progress indicators (MPIs).</li><li>• Evaluate new case studies, curriculum and trainings on non-energy/associated benefits.</li></ul> <p>Additional research objectives under development</p>
<b>Timing</b>	<p>The project will kick off in Q1 2026 and conclude in Q2 2027.</p>
<b>Third-Party Contractor(s)</b>	<p>NMR Group (partnered with Apex Analytics LLC)</p>
<b>Link to Previous MPER</b>	<p><a href="#">High-Performance HVAC Market Progress Evaluation Report #1</a></p>

## Integrated Systems (HVAC, Lighting, Motors)

### Gas High Efficiency DOAS Baseline and Key Assumptions Review

Kirstin Moreno

**Program:** High-Performance HVAC

**Project Stage:** PLANNING

<b>Description</b>	<p>To support the potential expansion of the electric High-Performance HVAC program to include gas high efficiency dedicated outdoor air systems (DOAS), NEEA is planning a third-party review of NEEA's newly developed Naturally Occurring Baseline (NOB) for gas high efficiency DOAS and key assumptions for savings rates, market adoption tracking and incremental costs.</p> <p>Fuel Type: Natural Gas</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Review and validate NEEA's NOB for gas high efficiency DOAS.</li><li>• Review and validate NEEA's key assumptions for gas high efficiency DOAS.</li></ul>
<b>Timing</b>	<p>The project will kick off in 2026.</p>
<b>Third-Party Contractor</b>	<p>Cadmus Group</p>

## Integrated Systems (HVAC, Lighting, Motors)

### Gas High Efficiency DOAS Specifier Market Research

Kirstin Moreno

**Program:** High-Performance HVAC

**Project Stage:** REPORTING

<b>Description</b>	<p>To support potential expansion of the High-Performance HVAC program to include gas high efficiency dedicated outdoor air systems (DOAS), this research explored market barriers to adoption and supply chain perspectives. Study methods include a survey and in-depth interviews with specifiers and asynchronous reviews of gas high efficiency DOAS configurations.</p> <p>Fuel Type: Natural Gas</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Confirm which opportunities and barriers previously identified for the uptake of all-electric very high efficiency DOAS also apply to gas high efficiency DOAS and identify any additional barriers and opportunities specific to gas high efficiency DOAS.</li><li>• Gather specifiers' perspectives on advantages, disadvantages and use cases of potential gas high efficiency DOAS configurations.</li><li>• Describe building types, market actors, early adopters, value proposition and decision processes for gas high efficiency DOAS, highlighting how they differ from all-electric very high efficiency DOAS.</li></ul>
<b>Timing</b>	<p>The project kicked off in Q2 2025 and a final report was posted in Q4 2025.</p>
<b>Third-Party Contractor(s)</b>	<p>OWL Research Associates</p>
<b>Link to Report</b>	<p><a href="#">Commercial HVAC Specifier Market Research: Gas High Efficiency DOAS - Northwest Energy Efficiency Alliance (NEEA)</a></p>

## Integrated Systems (HVAC, Lighting, Motors)

### Market Progress Evaluation Report (MPER) #2

Kirstin Moreno

**Program:** Efficient Rooftop Units (RTU)

**Project Stage:** PLANNING

<b>Description</b>	<p>NEEA's Efficient RTU program is actively working to transform the market for efficient RTUs in gas-heated commercial buildings across the region. This study is the first evaluation of the program's Market Transformation efforts.</p> <p>The evaluation contractor will conduct surveys and interviews with HVAC contractors and distributors, interview manufacturer representatives and conduct a document review.</p> <p>Fuel Type: Natural Gas</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Assess Market Transformation progress as measured by program market progress indicators (MPIs).</li><li>• Understand true timing constraints for RTU and Efficient RTU, both for stocking and for install.</li></ul>
<b>Timing</b>	<p>The project will kick off in Q1 2026 and conclude in Q2 2027.</p>
<b>Third-Party Contractor(s)</b>	<p>Apex Analytics, LLC</p>
<b>Link to Previous MPER</b>	<p><a href="#">Efficient Rooftop Units Market Progress Evaluation Report #1</a></p>

## Integrated Systems (HVAC, Lighting, Motors)

### LLLC Key Assumptions Review

Zdanna King

**Program:** Luminaire Level Lighting Controls (LLLC)

**Project Stage:** REPORTING

<b>Description</b>	<p>The LLLC program is planning to conduct a third-party assessment of the regional market share represented by NEEA's aggregated LLLC sales and rebate data. This study replicates an earlier analysis conducted using additional data sources.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>Review the LLLC program's estimates of market share represented by their aggregated and anonymized sales and rebate data to substantiate and, if necessary, revise a key assumption for reporting regional energy savings.</li></ul>
<b>Timing</b>	<p>This project kicked off in Q3 and will conclude in Q1 2026.</p>
<b>Third-Party Contractor(s)</b>	<p>Cadmus Group</p>

## Integrated Systems (HVAC, Lighting, Motors)

Industrial Market Research

Chris Cardiel

**Product Group:** Motor-Driven Systems

**Project Stage:** FIELDING

<b>Description</b>	<p>NEEA plans to field a study of regional industrial market dynamics in the Northwest to develop market insight that will inform programs within the Motor-Driven Systems Product Group (Efficient Fans and Extended Motor Products – Pumps) and opportunity assessment related to adjustable-speed drives.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Identify and prioritize industrial market barriers to uptake of highly efficient motor-driven equipment, including any similarities or distinctions by product type.</li><li>• Document industrial market actor roles, motivations, and path-to-purchase throughout the specification and selection process for motor-driven equipment, including any similarities or distinctions by product type.</li><li>• Assess the degree to which and ways in which industrial market actors consider energy efficiency to be a key factor in the selection of motor-driven equipment relative to other criteria.</li><li>• Document industrial market actor usage of remote monitoring software, particularly as pertaining to rotating equipment.</li></ul>
<b>Timing</b>	<p>This project will kick off Q4 2025 and conclude in Q3 2026.</p>

## Integrated Systems (HVAC, Lighting, Motors)

### Market Progress Evaluation Report (MPER) #2

Chris Cardiel

**Program:** Extended Motor Products (XMP) – Pumps

**Project Stage:** FIELDING

<b>Description</b>	<p>NEEA's XMP – Pumps program actively engages with manufacturer representatives, trade associations and other market actors to increase adoption of energy-efficient motor-driven products (specifically clean water pumps and circulators at or below 50 horsepower) across the Northwest region.</p> <p>In this second MPER, specific methodologies are likely to include a combination of survey questionnaires and in-depth interviews to support continued tracking of the program's market progress indicators (MPIs).</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Build on the results of XMP – Pumps MPER #1 by conducting the second cycle of tracking MPIs and reporting progress on near-term outcomes.</li><li>• Conduct formative evaluation of market actor perceptions and attitudes (particularly trust and perceived relevance) regarding the Hydraulic Institute's Energy Rating label for pumps and circulators.</li></ul>
<b>Timing</b>	The study kicked off in Q3 2025 and will conclude in Q3 2026.
<b>Third-Party Contractor</b>	Apex Analytics, LLC
<b>Link to Previous MPER</b>	<a href="#">Extended Motor Products Market Progress Evaluation Report #1</a>

## Integrated Systems (HVAC, Lighting, Motors)

### Agricultural Pumps Market Research

Chris Cardiel

**Program:** Extended Motor Products (XMP) – Pumps

**Project Stage:** REPORTING

<b>Description</b>	<p>To support ongoing program planning and opportunity assessment for the XMP – Pumps program, NEEA is fielding a research study to explore agricultural pump market dynamics across the Northwest.</p> <p>Study methods include a literature review and in-depth interviews with key agricultural professionals (manufacturers and representatives, specifying engineers, contractors and end users).</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Identify and prioritize agricultural market barriers to the uptake of highly efficient pumps for irrigation purposes.</li><li>• Document market actor motivations and agricultural irrigation pump path to purchase.</li><li>• Assess the accuracy of key market projections documented in NEEA's <a href="#">2013 Agricultural Irrigation Market Characterization</a>, specifically pertaining to regional irrigated agricultural acreage and market actor technology usage.</li></ul>
<b>Timing</b>	<p>The study kicked off in Q4 2024 and will conclude in Q4 2025.</p>
<b>Third-Party Contractor(s)</b>	<p>Resource Innovations</p>

## Integrated Systems (HVAC, Lighting, Motors)

### Fan Manufacturer Representative and Specifier Market Research

Chris Cardiel

**Program:** Efficient Fans

**Project Stage:** REPORTING

<b>Description</b>	<p>NEEA is conducting a market research study to support continued refinement of the Efficient Fans program's design and intervention strategy.</p> <p>Study methods include in-depth interviews with manufacturer representatives and specifying engineers.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Compile a robust list of commercial and industrial stand-alone fan manufacturer representatives and specifying engineers active in the Northwest.</li><li>• Identify and document key communication and relationship dynamics between fan system market actors (including particularly influential sources of information).</li><li>• Identify and document persistent challenges endemic to stand-alone fan specification, sale and installation processes as experienced by manufacturer representatives and specifying engineers.</li><li>• Solicit input from regionally active stand-alone fan manufacturer representatives and specifying engineers regarding the clarity, sensibility and appropriateness of programmatic language and terminology related to in-scope fan systems.</li></ul>
<b>Timing</b>	<p>This project kicked off in Q4 2024 and will conclude in Q4 2025.</p>
<b>Third-Party Contractor(s)</b>	<p>DNV Energy Insights, Inc.</p>

## Integrated Systems (HVAC, Lighting, Motors)

### Fan Naturally Occurring Baseline Forecast Review

Chris Cardiel

**Program:** Efficient Fans

**Project Stage:** FIELDING

<b>Description</b>	<p>NEEA has contracted for a third-party review of its approach to establishing the Naturally Occurring Baseline (NOB) for the market for stand-alone fans.</p> <p>Study methods include a review of relevant datasets and secondary materials as well as interviews with NEEA market analysts to understand the rationale underlying modeling decisions.</p> <p>Fuel Type: Electric</p>
<b>Model Review Questions</b>	<ul style="list-style-type: none"><li>• Is NEEA's approach to calculating and structuring the baseline Fan Efficiency Index (FEI) for fans sold in Idaho, Montana, Oregon and Washington reasonable, absent its market intervention via the Fans program?</li><li>• To develop its estimates, NEEA used historical data provided by its manufacturer collaborators alongside the U.S. Department of Energy technical support document and Notice of Proposed Rulemaking developed for fans and blowers in 2023. Are these data sources reasonable, and should NEEA consider using any additional data sources?</li><li>• Are there any improvements to NEEA's current method for calculating baseline FEI of fans sold in the Northwest that would improve the NOB?</li></ul>
<b>Timing</b>	<p>This project kicked off in Q4 and will conclude in Q1 2026.</p>
<b>Third-Party Contractor(s)</b>	<p>Apex Analytics, LLC</p>

## Products (Consumer Products, Water Heating)

### Market Progress Evaluation Report (MPER) #3

Zdanna King

**Program:** Retail Product Portfolio (RPP)

**Project Stage:** REPORTING

<b>Description</b>	<p>The third RPP MPER is tracking the program's progress in overcoming market barriers through document and sales data review, web-scraping analysis, and in-depth interviews with program staff and external collaborators.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Document activities and outputs for each product in the RPP program (clothes washers, clothes dryers, all-in-one washer/dryer combinations, refrigerators, room air conditioners and televisions) and assess progress on applicable outcomes through measurement of market progress indicators (MPIs).</li><li>• Explore how program activities have influenced manufacturers since the program's inception and recommend how this influence could be assessed in consistent and cost-effective ways beyond those already measured.</li></ul>
<b>Timing</b>	<p>This project kicked off in Q2 2025 and will conclude in Q1 2026.</p>
<b>Third-Party Contractor(s)</b>	<p>Level 7 Market Research</p>
<b>Link to Previous MPER</b>	<p><a href="#">Retail Product Portfolio Market Progress Evaluation Report #2</a></p>

## Products (Consumer Products, Water Heating)

### Televisions Model Review

Zdanna King

**Program:** Retail Product Portfolio (RPP)

**Project Stage:** REPORTING

<b>Description</b>	<p>As the RPP program increases its support of energy-efficient televisions, NEEA is using aggregated and anonymized sales data and market condition insights to create key assumptions necessary for reporting regional energy savings and developing a Naturally Occurring Baseline (NOB) of estimated energy-efficient television market penetration over the next 20 years. Study activities will include a document review and analysis to evaluate NEEA's key assumptions and NOB and identify recommendations.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<p>Evaluate several key assumptions used to inform NEEA's modeling of Televisions, including:</p> <ul style="list-style-type: none"><li>• Assess NEEA's current assumption that all televisions meeting the 2023 Television Manufacturers' Voluntary Agreement also meet ENERGY STAR® Version 9.1 specifications for 'standby' mode and make recommendations for improvement, if needed.</li><li>• Review NEEA's television model number suppression approach for categorizing energy-efficient televisions represented in sales data and make recommendations, if indicated, on how to refine this approach.</li><li>• Assess if the current margin of power usage added to raw lab test data for 'on-mode' power calculations is appropriately conservative, and if needed, make recommendations for adjustments.</li><li>• Review NEEA's average wattage estimates and Unit Energy Consumption calculations for televisions and conduct secondary research to make recommendations for revisions, if indicated.</li></ul>
<b>Timing</b>	<p>The project will kick off in Q4 2025 and will conclude in in Q1 2026.</p>

Products (Consumer Products, Water Heating)

High-Performance Clothes Dryers Naturally Occurring Baseline (NOB) & Key Assumptions Review

Zdanna King

**Program:** Retail Product Portfolio (RPP)

**Project Stage:** REPORTING

Description	<p>NEEA is conducting a review of its two Naturally Occurring Baseline (NOB) models for high-performance clothes dryers, leveraging subject matter expertise, primary data collection and literature review.</p> <p>Fuel Type: Electric</p>
Research Objectives	<ul style="list-style-type: none"><li>Review NEEA’s NOB for ENERGY STAR (Version 1) clothes dryers and make recommendations, as needed, to revise modeling, taking into account delays in federal standard revisions.</li><li>Conduct secondary research to assess NEEA’s NOB for heat pump dryers in all-in-one-laundry units, given that this modeling is originally based on stand-alone dryer units, not combination units.</li><li>Leverage methods used to assess the first two research objectives to explore what NEEA’s modeling approach could gain from including bin sizes in its NOBs for clothes dryers and, if appropriate, make recommendations for revising the models to account for bin sizes.</li></ul>
Timing	<p>The project kicked off in Q4 2025 and will conclude in Q1 2026.</p>
Third-Party Contractor(s)	<p>Cadmus Group</p>

## Products (Consumer Products, Water Heating)

### Market Progress Evaluation Report (MPER) #8

Anu Teja

**Program:** Heat Pump Water Heaters (HPWH)

**Project Stage:** REPORTING

<b>Description</b>	<p>The eighth MPER for NEEA's HPWH program is currently underway. The MPER will track program progress toward its predefined market outcomes over the last 18 months. Specific data collection methodologies include quantitative web-enabled surveys of Northwest HPWH purchasers and installers to better understand customer satisfaction and to track awareness and opinions of HPWHs over time.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Review and verify that strategic activities identified in 2024 were conducted.</li><li>• Track identified market progress indicators (MPIs) focused on measuring a specified set of program outcomes per the program logic model.</li><li>• Identify the nature and prevalence of contractor callbacks and discern the degree to which the perceived likelihood of callbacks impact recommendations and installation of HPWHs.</li></ul>
<b>Timing</b>	<p>The project kicked off in Q1 2025 and will conclude in early Q1 2026.</p>
<b>Third-Party Contractor(s)</b>	<p>NMR Group</p>
<b>Link to Previous MPER</b>	<p><a href="#">Heat Pump Water Heater Market Progress Evaluation Report #7</a></p>

## Codes, Standards and New Construction

### Market Progress Evaluation Report (MPER) #6

Chris Cardiel

**Activity:** Codes

**Project Stage:** REPORTING

<b>Description</b>	<p>NEEA is conducting the sixth MPER for its commercial and residential codes efforts. This study is intended to build on and complement learnings from the recently completed Codes MPER #5 and will include ongoing assessment of NEEA's progress in the Northwest codes market relative to market progress indicators (MPIs). Study methods include a review of NEEA program materials, interviews with NEEA Codes team members and code market actors, and surveys of individuals who have completed NEEA-sponsored code trainings.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Assess NEEA's progress on selected logic model outcomes, including those associated with (a) the Codes team's training and education activities, (b) voluntary certification and above-code construction and (c) jurisdictional goals and state-level code support.</li><li>• Conduct a qualitative analysis of NEEA's progress toward outcomes associated with its code influence activities conducted during code cycles beginning in 2018, with a particular focus on code influence activities beginning in 2023.</li><li>• Conduct formative evaluation regarding market actor awareness, use, and valuing of key code compliance tools, including the Washington State Energy Code Commercial Technical Support website and webtool, COMcheck and REScheck.</li></ul>
<b>Timing</b>	<p>This project kicked off in Q4 2024 and will conclude in Q1 2026.</p>
<b>Third-Party Contractor(s)</b>	<p>NMR Group, Inc.</p>
<b>Link to Previous MPER</b>	<p><a href="#">Codes Market Progress Evaluation Report #5</a></p>

## Codes, Standards and New Construction

### NEEA Code Baseline and Assumption Review

Meghan Bean

**Activity:** Codes

**Project Stage:** REPORTING

<b>Description</b>	<p>NEEA has conducted a review of its Naturally Occurring Baselines (NOBs) for commercial and residential energy codes in the Northwest.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Assess whether NEEA's approach of tracking 100% of the total regional savings as co-created savings for 10 years after construction starts without applying an additional adjustment factor is still the most reasonable approach for codes.</li><li>• If indicated, make recommendations for how NEEA should update its NOB and other assumptions to more accurately capture NEEA and its partners' influence on code changes in the Northwest.</li><li>• Assess whether it is appropriate to apply the same NOB assumptions to all states in the Northwest and to both the residential and commercial sectors.</li></ul>
<b>Timing</b>	<p>This project kicked off in Q4 2024. The final report is available on <a href="https://www.neea.org">neea.org</a>.</p>
<b>Third-Party Contractor(s)</b>	<p>Industrial Economics (IEc) and Resource Refocus</p>
<b>Link to Report</b>	<p><a href="#">NEEA Code Baseline and Assumption Review</a></p>

## Codes, Standards and New Construction

### Oregon Residential Code Compliance Evaluation

Meghan Bean

**Activity:** Residential Codes

**Project Stage:** REPORTING

<b>Description</b>	<p>NEEA is conducting a code compliance evaluation to review assumptions underlying its estimation of energy savings resulting from NEEA and its partners' involvement in the Oregon state code processes.</p> <p>The contractors collected data from permits, conducted site visits to residential new construction building sites, conducted interviews with market actors and collected data on inhabited homes using homeowner self-audits.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Assess statewide compliance among single-family homes built under the 2021 Oregon Residential Specialty Code.</li><li>• Provide statewide findings regarding primary space and water heating fuel and above-code elements using data collected on individual code requirements.</li><li>• Provide an analysis of builders' choices regarding compliance pathways and the efficiency level to which a home is built.</li></ul>
<b>Timing</b>	<p>This project kicked off in Q2 2024. The final report is available on <a href="https://neea.org">neea.org</a>.</p>
<b>Third-Party Contractor(s)</b>	<p>Industrial Economics (IEc), Resource Refocus, NMR Group</p>
<b>Link to Report</b>	<p><a href="#">Oregon Residential Code Compliance Evaluation</a></p>

## Codes, Standards and New Construction

### Oregon and Washington Residential Code Compliance Evaluations

Meghan Bean

**Activity:** Residential Codes

**Project Stage:** FIELDING

<b>Description</b>	<p>NEEA is conducting code compliance evaluations to review assumptions underlying its estimation of energy savings resulting from NEEA and its partners' involvement in Oregon and Washington code processes.</p> <p>The contractor will collect data from a variety sources, including building energy permits and site visits to residential new construction sites.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Assess statewide compliance among single-family homes built under the 2023 Oregon Residential Specialty Code (ORSC) and 2021 Washington State Energy Code (WSEC).</li><li>• Provide statewide findings regarding primary space and water heating fuel.</li><li>• Provide an analysis of builders' choices regarding heating system and duct installation.</li></ul>
<b>Timing</b>	<p>This project will kick off in Q1 2026 and will conclude in Q4 2026.</p>

## Codes, Standards and New Construction

### Idaho Commercial New Construction Code Compliance Evaluation

Chris Cardiel

**Activity:** Commercial Codes

**Project Stage:** REPORTING

<b>Description</b>	<p>The Idaho Commercial New Construction Code Evaluation focuses on (a) evaluating compliance with the amended 2018 International Energy Conservation Code (IECC) in newly constructed commercial buildings, and (b) measuring the energy performance of a subset of these buildings as compared with the average energy performance of buildings constructed under previous code.</p> <p>The study design and methodology selected for this project focuses on permit data and building plans as the primary sources of construction and compliance information, with virtual or in-person site visits planned for a subsample of participating buildings to validate the accuracy of permit data.</p> <p>Fuel Type: Dual-Fuel</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Catalog major design and engineering practices by major building type for primary building systems including envelope, mechanical and HVAC systems, lighting and service water heating, as well as the primary fuel type(s) used in each building.</li><li>• Assess system-level and whole building compliance of new commercial buildings in Idaho constructed under the 2018 IECC, focusing primarily on each of the individual primary building systems.</li><li>• Assess the degree to which the methodology selected for use in this study (a) generates reliable information regarding decisions made by builders in seeking compliance with current commercial building code, and (b) is likely to be replicable over time and across states.</li></ul>
<b>Timing</b>	<p>This project kicked off in Q3 2023 and will conclude in Q4 2025.</p>
<b>Third-Party Contractor(s)</b>	<p>Opinion Dynamics</p>

## Market Diffusion

### Manufactured Homes Market Diffusion Evaluation #1

Anu Teja

**Program:** Manufactured Homes

**Project Stage:** FIELDING

<b>Description</b>	<p>Since 2015, NEEA's Manufactured Homes program has worked to increase the adoption of manufactured homes meeting the Northwest Energy Efficient Manufactured Housing Program™ (NEEM)+ specification.</p> <p>Now that the program is no longer directly engaged in the market, it is important to track market activities. Following the recommendations of the 2022 Transition Market Progress Evaluation Report (T-MPER), NEEA will conduct its first Market Diffusion Evaluation study.</p> <p>Fuel Type: Electric</p>
<b>Research Objectives</b>	<ul style="list-style-type: none"><li>• Determine if manufacturers and retailers offer manufactured homes meeting efficiency specifications that provide whole-home energy savings of at least 10% over a home with market-average efficiency sold in the Northwest.</li><li>• Track diffusion indicators to determine whether the market share of qualified homes remains steady or increases, at least three manufacturers offer qualified homes and qualified home sales are geographically distributed.</li></ul>
<b>Timing</b>	<p>This project kicked off in Q4 2025 and will conclude in Q2 2026.</p>
<b>Third-Party Contractor(s)</b>	<p>Apex Analytics LLC</p>
<b>Link to Previous Diffusion Evaluation</b>	<p><a href="#">Manufactured Homes Transition Market Progress Evaluation Report</a></p>

## Questions? Contact Us

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## At-a-Glance

Project	Stage
<b>Integrated Systems (HVAC, Lighting, Motors)</b>	
Commercial HVAC Product Group: ERV/HRV Ownership and Maintenance Market Research	Reporting
Advanced Heat Pump: Market Progress Evaluation Report #1	Fielding
Advanced Heat Pump & Dual-Fuel Residential HVAC: Installation Contractor Market Research	Fielding
High-Performance HVAC: Market Progress Evaluation Report #2	Planning
High-Performance HVAC: Gas High Efficiency DOAS Baseline and Key Assumptions Review	Planning
High-Performance HVAC: Gas High Efficiency DOAS Specifier Market Research	Reporting
Efficient RTU: Market Progress Evaluation Report #2	Planning
LLLC: Key Assumptions Review	Reporting
Motor-Driven Systems: Industrial Market Research	Fielding
XMP – Pumps: Market Progress Evaluation Report #2	Fielding
XMP – Pumps: Agricultural Pumps Market Research	Reporting
Efficient Fans: Fan Manufacturer Representative and Specifier Market Research	Reporting
Efficient Fans: Naturally Occurring Baseline Forecast Review	Fielding
<b>Products (Consumer Products, Water Heating)</b>	
RPP: Market Progress Evaluation Report #3	Reporting
RPP: Televisions Model Review	Reporting
RPP: High-Performance Clothes Dryers NOB & Key Assumptions Review	Reporting
HPWH: Market Progress Evaluation Report #8	Reporting
<b>Codes, Standards and New Construction</b>	
Codes: Market Progress Evaluation Report #6	Reporting
Codes: NEEA Code Baseline and Assumptions Review	Reporting
Residential Codes: Oregon Residential Code Compliance Evaluation	Reporting
Residential Codes: Oregon and Washington Residential Code Compliance Evaluations	Fielding
Commercial Codes: Idaho Commercial New Construction Code Compliance Evaluation	Reporting
<b>Market Diffusion</b>	
Manufactured Homes: Manufactured Homes Market Diffusion Evaluation #1	Fielding

## PROJECT STAGE DEFINITIONS

- *PLANNING: MRE projects from inception through proposal selection*
- *FIELDING: MRE projects from kick-off through the completion of field work*
- *REPORTING: MRE projects in the analysis/synthesis stage through report posting*