2025 Q1 Market Research & Evaluation Quarterly Newsletter

WHAT'S NEW:

Greetings to all of you!

Welcome to spring and the Market Research and Evaluation (MRE) team's first newsletter of 2025! Here in the Northwest, the days aren't necessarily sunnier, but they are definitely longer.

The MRE team is busy wrapping up several large and long-running studies, including three building code compliance studies (for the states of Idaho, Montana and Oregon) and the first Market Progress Evaluation Reports (MPERs) for two of NEEA's Commercial HVAC programs. The latter launched nearly two years ago, so the team is looking forward to the conclusion of these inaugural studies.

Four other MPERs are also kicking off that will provide evaluation findings and actionable market insights to the programs they support, including: Retail Product Portfolio, Luminaire Level Lighting Controls, Heat Pump Water Heaters, and Commercial and Residential Codes. Read on to learn more and, as always, please reach out with any questions or suggestions.

~ **Amy Webb, Sr. Manager**, Market Research & Evaluation ~

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PUBLISH DATE: March 20, 2025

At a Glance

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Regional Studies	Northwest Market Characterization			✓
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Products	Heat Pump Water Heater: *Market Progress Evaluation Report #8*		✓	
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DUAL-FUEL (Electric & Natural Gas) PROJECTS:

NATURAL GAS PROJECTS:

***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

At a Glance

MARKET RESEARCH & EVALUATION PROJECTS

Codes, Standards, New Construction

Market Diffusion

		PLANNING*	FIELDING*	REPORTING*
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Standards: *Portable AC and Air Compressor Standards Evaluations*			✓	
Codes: *NEEA Codes Baseline and Assumption Review*				✓
Codes: *Market Progress Evaluation Report #6*			✓	
Residential Codes: *Home Energy Raters Market Research*				✓
Residential Codes: *Montana Residential Code Compliance Evaluation*				✓
Residential Codes: *Oregon Residential Code Compliance Evaluation*				✓
Commercial Codes: *Idaho Commercial New Construction Code Compliance Evaluation*			✓	
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DUAL-FUEL (Electric & Natural Gas) PROJECTS:

NATURAL GAS PROJECTS:

***PLANNING:** MRE projects from inception through proposal selection

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***REPORTING:** MRE projects in the analysis/synthesis stage through report posting

Northwest Market Characterization | REPORTING

NEEA contracted with LD Consulting in Q2 2024 to conduct a characterization of the market for Northwest consumers. Specifically, the research project aimed to contrast and compare characteristics of rural, suburban, and urban markets to identify market transformation strategies that could accelerate the delivery of program benefits to rural markets. The study used the National Center for Education Statistics (NCES) classification system for geographic locales, which defines areas as either rural, town, suburban, or urban. The mixed methods study included a literature review, interviews with NEEA staff, and a quantitative analysis of existing data sources (such as American Community Survey data and U.S. Energy Information Administration data) to compare consumer and supply chain characteristics across the four locales. Results from the data analysis show that median incomes for rural and urban households in the Northwest are similar. On average, suburban household income is much higher, and town household income is much lower. Twenty-one percent of rural households in the Northwest are considered energy burdened, more than twice the rate of urban and suburban households. Many preferences related to purchasing habits do not vary significantly across locales.

Beginning in late Q4 2024, fielded qualitative research to investigate themes from the data analysis that suggested opportunities to close relative gaps in the delivery of market transformation program benefits. Qualitative methods included interviews with residential consumers, supply chain market actors, and community-based organizations involved in energy and energy efficiency. The study concluded with “data parties” where research participants were invited to receive, verify and help contextualize findings.

A final report is expected in Q2 2025.

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Market Progress Evaluation Report #1

Efficient Rooftop Units (RTU) | **REPORTING**

As of late 2022, 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 will be the first evaluation of the program's Market Transformation efforts. The program's overarching objectives for the study are to:

- Provide timely and actionable formative evaluation findings and recommendations to enable continuous improvement of the program.
- Assess market transformation progress as measured by program Market Progress Indicators (MPIs).
- Qualitatively assess program influence on observed market transformation.

NEEA contracted with Apex Analytics and NMR Group to conduct the evaluation. NEEA kicked off the Efficient RTU evaluation in June 2023. The evaluation team conducted focus groups with two small groups of commercial building decision makers (e.g., building owners, operators, and facilities managers); surveyed commercial building decision makers across the region; and interviewed individuals who have or have considered having an efficient RTU on their building. In late 2024, the evaluation team conducted focused interviews with a small number of manufacturer representatives active in the Northwest RTU market. The evaluation team is finishing up their review of NEEA documentation and materials related to identified MPIs.

This study is being conducted in close coordination with the Market Progress Evaluation Report (MPER) for the High-Performance HVAC program, which is also being completed by Apex Analytics and NMR Group. Coordination between these studies brings about several efficiencies, such as reducing the burden on the market actors recruited to participate in the research and streamlining NEEA staff time and other resources.

The evaluation will continue through winter 2024-2025, with a final report anticipated in Q2 2025.

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Natural Gas High-Efficiency DOAS Market Research

High-Performance HVAC | **FIELDING**

In order to support potential expansion of the High-Performance HVAC program to include Gas High-Efficiency (HE) Dedicated Outdoor Air Systems (DOAS), NEEA intends to field a research study exploring market barriers to adoption and supply chain perspectives.

The objectives of this study are to:

- Confirm which opportunities and barriers previously identified for the uptake of very high-efficiency DOAS also apply to Gas HE DOAS, and identify any additional barriers and opportunities specific to Gas HE DOAS
- Gather specifiers' perspectives on advantages, disadvantages, and use cases of potential Gas HE DOAS configurations
- Describe building types, market actors, early adopters, value proposition and decision processes for Gas HE DOAS highlighting how they differ from all-electric very high-efficiency DOAS

Study methods are likely to focus on primary data collection (e.g., in-depth interviews) to seek input and insight from professionals active in this market, especially HVAC designers and specifiers. Project kickoff is anticipated for Q2 2025.

MRE Scientist: Kirstin Moreno
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Market Progress Evaluation Report #1

High-Performance HVAC | **REPORTING**

As of late 2022, NEEA's High-Performance HVAC program is intervening to transform the market for very high efficiency (VHE) Dedicated Outside Air Systems (DOAS) for electrically heated commercial buildings across the region. This study will be the first evaluation of the program's Market Transformation efforts. The program's overarching objectives for the study are to:

- Provide timely and actionable formative evaluation findings and recommendations to enable continuous improvement of the program.
- Assess market transformation progress as measured by program MPIs.
- Qualitatively assess program influence on observed market transformation.

NEEA contracted with Apex Analytics and NMR Group to conduct the evaluation. NEEA kicked off the High-Performance HVAC evaluation in July 2023. In Q2 2024, the evaluation team completed the analysis of HVAC system designer and manufacturer representative survey data. The evaluation team is also in the midst of reviewing NEEA documentation and materials related to identified market progress indicators. The team is also conducting a webscan of teaching materials that draw on NEEA's VHE DOAS principles.

This study is being conducted in close coordination with the MPER for the Efficient RTU program, which is also being completed by Apex Analytics and NMR Group. Coordination between these studies brings about several efficiencies, such as reducing the burden on the market actors recruited to participate in the research and streamlining NEEA staff time and other resources.

The evaluation will be ongoing through winter 2024-2025, with a final report anticipated in Q2 2025.

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Fan Manufacturer Representative and Specifier Market Research

Efficient Fans | **FIELDING**

NEEA contracted with DNV Energy Insights, Inc. to conduct a market research study in support of continued refinement of the Efficient Fans program's design and intervention strategy. The study focuses specifically on addressing the following objectives:

- Compile a robust list of C&I stand-alone fan manufacturer representatives and specifying engineers active in the four-state region (ID, MT, OR, and WA);
- Identify and document key communication and relationship dynamics between fan system market actors (including particularly influential sources of information);
- Identify and document persistent challenges endemic to the stand-alone fan specification, sale, and installation process as experienced by manufacturer representatives and specifying engineers; and
- 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.

The study kicked off in December 2024. Instrument development, sample preparation, and respondent recruitment are currently underway, with data collection (specifically in-depth interviews with relevant market actors) scheduled to continue through Q2 2025.

Data analysis and report preparation are scheduled for late Q2–early Q3 2025. The final report is anticipated in Q3 2025.

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Agricultural Pumps Market Research

Extended Motor Products (XMP) | **FIELDING**

In order to support ongoing program planning and opportunity assessment for the XMP - Pumps program, NEEA contracted with Resource Innovations to field a research study exploring the dynamics of the agricultural pump market across NEEA's four-state region. Specific objectives of this study are as follows:

- Identify and prioritize agricultural market barriers to uptake of highly efficient pumps for irrigation purposes;
- Document market actor motivations and agricultural irrigation pump path-to-purchase; and
- Assess the accuracy of key market projections documented in NEEA's 2013 Agricultural Irrigation Market Characterization, specifically as pertaining to regional irrigated agricultural acreage and market actor technology usage.

The study kicked off in Q4 2024, with instrument development, sample preparation, and respondent recruitment currently underway. Study methods include a robust literature review paired with in-depth interviews with members of key agricultural professionals (manufacturers and representatives, specifying engineers, contractors, and end users) to seek input and insight from professionals active in the agricultural pump market.

Primary data collection is scheduled to run from Q1 through Q2 2025, followed by data analysis and report preparation. The final report is anticipated in Q3 2025.

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Market Progress Evaluation Report #2

Extended Motor Products (XMP) | **PLANNING**

As of Q2 2022, NEEA's XMP - Pumps program is actively engaging with manufacturers' 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 four-state region. This Market Progress Evaluation Report (MPER) will be the second evaluation of the program's Market Transformation efforts and will build on findings from the recently completed MPER #1, which is available on neea.org. The overarching objectives for the study are to:

- Provide timely and actionable formative evaluation findings and recommendations to enable continuous improvement of the program;
- Assess market transformation progress as measured by program MPIs; and
- Qualitatively assess program influence on observed market transformation.

Specific study objectives, MPIs to be assessed, and recommended methodologies will be identified through Q3 2025. The evaluation will be ongoing through Q2 2026, with a final report anticipated in late Q2 or early Q3 2026.

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Industrial Market Research

Motor-Driven Systems | **PLANNING**

To improve market insight across programs within the Motor-Driven Systems Product Group (including Efficient Fans and Extended Motor Products) and to inform opportunity assessment related to adjustable-speed drives, NEEA intends to field a research study exploring the dynamics of the regional industrial market for these technologies. Specific objectives of this study are under development but may include assessment of market actor relationships, decision-making factors related to selection of relevant products, and identification of market barriers distinct to the industrial sector. Project kickoff is anticipated in Q3 2025.

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Exterior Luminaire Level Lighting Controls in Parking Lots Market Research

Luminaire Level Lighting Controls (LLLC) | **REPORTING**

NEEA is considering adding exterior LLLC in parking lots to the LLLC program. To support this, NEEA is contracting with Cadmus to conduct interviews with parking lot lighting installers and purchasers in Q3 2024. This study will:

- Determine and describe all items that trigger a parking lot lighting replacement or upgrade decision, as well as what factors go into the upgrade and/or replacement decision, so that NEEA can assess alignment of exterior LLLC with their existing LLLC Program.
- Assess the known and potential benefits of LLLC systems compared with other lighting solutions to assist NEEA in refining the value proposition for installing LLLC in exterior parking lots.

A report is anticipated in Q2 2025.

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Market Progress Evaluation Report #3

Luminaire Level Lighting Controls (LLLC) | **FIELDING**

In late 2024, NEEA contracted with Cadmus to complete its third MPER for the LLLC Program. This evaluation follows the Program's second MPER, posted on neea.org in November of 2023, and is crucial for tracking changes in the market that indicate whether the LLLC program is effective in overcoming identified market barriers.

Interviews and surveys are being collected in Q4 2024 through Q1 2025 with stakeholders, manufacturers, installers, designers, architects, engineers, and commercial building decision makers to address the following objectives:

- Review and verify that the LLLC program has conducted the strategic activities described in its quarterly progress tracking documents and outlined in its logic model since the previous MPER;
- Track identified MPIs focused on measuring the reduction of identified market barriers and conduct year-over-year analyses when indicated, in order to report progress on several program outcomes predicted by the logic model; and
- Conduct market research to describe the rationale of buyers and sellers of LLLC that include it in their initial project plans, but do not follow through with the sale.

A final report is anticipated in Q3 2025.

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ENERGY STAR Windows, Doors, and Skylights Version 7.0 Evaluation

High-Performance Windows | **REPORTING**

NEEA has contracted with Apex Analytics, LLC to conduct a study that will explore if and how NEEA's High-Performance Window program activities have influenced the new ENERGY STAR® Version 7.0 rating for windows and doors. Through the program's involvement in the Partnership for Advanced Window Solutions (PAWS), its letters to ENERGY STAR, and other related work, it is possible that NEEA influenced the adoption of the new rating. In order to document these findings, Apex Analytics is reviewing documents and interviewing PAWS members, NEEA staff, and ENERGY STAR representatives in Q3 2024. A final report is anticipated in Q2 2025.

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Commercial Whole Buildings Implementation and Market Research

Whole Building Special Project | **PLANNING**

The vision for NEEA's Commercial Whole Building Special Project is to motivate the commercial building sector to undertake deep energy efficiency retrofits in a way that is widely available, scalable, and affordable for owners and occupants. To better understand this market, NEEA is conducting market research to support the Whole Buildings Special Project. The two research objectives are:

- Determine approximate quantity of each type of key market actor that influences building decision makers, and market share of the largest ones of each type operating in the Northwest. This information will help inform market leverage points NEEA might target in its Market Transformation efforts.
- Gather and synthesize insights into how building owners and asset managers plan for and finance operations and maintenance (O&M) and capital expenditures.

This study, which is specially funded, will build on the recent BetterBricks Commercial Buildings Decision Maker study. The kickoff is expected in Q2 2025.

MRE Scientist: Kirstin Moreno
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Market Progress Evaluation Report #8

Heat Pump Water Heaters (HPWH) | **FIELDING**

Work on the eighth MPER for the HPWH program will kick off in late Q1 2025 with the NMR Group. The MPER will track program progress over the last 18 months. Key objectives include:

- Reviewing and verifying that the program has conducted the strategic activities it set out to complete in 2024.
- Tracking identified MPIs focused on measuring a specified set of program outcomes per the program logic model.
- Identifying nature and prevalence of callbacks to discern how that impacts installers' in recommending and installing HPWHs.

Data collection activities and analysis will continue through the end of Q3 2025, resulting in a final report expected by the end of 2025.

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Televisions Voluntary Agreement Evaluation and Model Review

Retail Product Portfolio (RPP) | **FIELDING**

In Q2 2025, NEEA will explore and document how the RPP program may or may not have affected the Voluntary Agreement on Energy Efficiency for Televisions. This will include a third party review of the program's modeling for reporting co-created energy savings for televisions, including its naturally occurring baseline, predicted outcomes with the program's interventions, and the key modeling assumptions. Specific research objectives are still being drafted. The project is planned to begin in Q2 2025 with a public report expected in Q4 2025.

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Market Progress Evaluation Report #3

Retail Product Portfolio (RPP) | **FIELDING**

NEEA is currently finalizing research objectives for its third RPP MPER. The study, which follows the program's second MPER, will assess the program's progress towards its outcomes by tracking year over year progress on its MPIs. The RPP Program provides mid-stream incentives to retailers for sales of qualifying efficient products, such as refrigerators and clothes washers, to influence retail assortment and product promotion, obtain access to sales data, and ultimately influence the ENERGY STAR® specification or federal standard. This study will begin in Q2 2025 and a final report is expected in Q1 2026.

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Connected Consumer Products Market Research

Retail Product Portfolio (RPP) | **REPORTING**

NEEA contracted with Level 7 Market Research from June to December of 2024 to describe consumer acceptance of, experiences with, and willingness to purchase connected consumer products. Additionally, this research ventured to describe predictors of consumer interest and uptake, in order to inform NEEA's RPP Market Transformation program's strategic planning around these new appliances.

Level 7 conducted a mixed method market research project. They reviewed relevant primary documents, surveyed over 2,000 consumers from the Northwest region, led focus groups, and utilized online bulletin board discussion groups to address these research objectives. The study found that despite low ownership and utilization of the features provided by these appliances, there is widespread awareness of connected consumer products. Customers were excited by the potential of connected consumer products to lower energy bills and reduce usage, but were concerned about additional costs for these features, as well as potential problems with data privacy and cyber security.

The final report is available on neea.org.

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Battery Chargers Standard Evaluation, Notice of Withdrawal Issued by DOE

Standards | **WITHDRAWN**

NEEA's Codes and Standards team engaged in efforts to increase the stringency of the federal efficiency standard for battery chargers. NEEA contracted with Michaels Energy to conduct a qualitative assessment of NEEA's influence on the standards processes and provide a quantitative estimate of the share of savings resulting from the standards that are the result of NEEA and other efficiency organizations' efforts. The project kicked off in September 2023 but paused in late 2023 due to a change in the U.S. Department of Energy's (DOE) timeline for publishing the final rule. In January 2025 DOE published a Notice of Withdrawal for the standard, citing pushback from multiple parties. Because a final rule will not be published, NEEA has cancelled the evaluation.

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Portable AC and Air Compressor Standards Evaluations

Standards | **FIELDING**

NEEA's Codes and Standards team engaged in efforts to increase the stringency of the federal standards for portable air conditioners and air compressors. NEEA contracted with Michaels Energy to conduct a qualitative assessment of NEEA's influence on the standards processes and provide a quantitative estimate of the share of savings resulting from the standards that are the result of NEEA and other efficiency organizations' efforts. Both evaluations kicked off in November 2024. Michaels Energy will review NEEA records and publicly available documents and will conduct interviews with key stakeholders from NEEA, U.S. DOE and other organizations. Final reports are anticipated in late Q2 2025.

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NEEA Codes Baseline and Assumption Review | Codes | FIELDING

NEEA contracted with Industrial Economics (IEc) and Resource Refocus to conduct a third-party review of its Naturally Occurring Baselines for commercial and residential energy codes in the Northwest. Specifically, the IEc team will:

- 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 Natural Market Baseline for codes.
- If not, make recommendations for how NEEA should update its baseline and other assumptions to more accurately capture NEEA and its partners' influence on code changes in the Northwest.
- Assess whether it is appropriate to apply the same approach to all states in the Northwest and to both the residential and commercial sectors.

This project kicked off in Q4 2024, and the final report will be published in Q2 2025.

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Market Progress Evaluation Report #6

Codes | **FIELDING**

NEEA contracted with NMR Group, Inc., to field the sixth MPER for its commercial and residential codes efforts. This study is intended to build on and complement the learnings generated through the recently completed Codes MPER #5 and will include ongoing assessment of NEEA's progress in the Northwest codes market relative to recently established MPIs. Specific objectives for the study are to:

- 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;
- Conduct a qualitative analysis of NEEA's progress on outcomes associated with its code influence activities conducted during code cycles occurring from 2018 onward, with a particular focus on code influence activities occurring from 2023 onward; and
- 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.

A project kick-off was held in mid-Q4 2024, with sample development and instrument preparation currently underway. Data collection is scheduled to occur during Q1–Q2 2025, including interviews with NEEA Codes program staff and a wide range of code market actors, as well as surveys with individuals who have completed NEEA-sponsored code trainings. Data analysis and initial report preparation are scheduled to occur in Q2 2025, with a final report anticipated in early Q3 2025.

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Home Energy Raters Market Research

Residential Codes | **REPORTING**

NEEA contracted with TRC to conduct market research with home energy raters in the Northwest to meet the following objectives: 1) Develop an estimate of the number of home energy raters currently working in the new construction market in each state in the Northwest, and 2) Provide an assessment of:

- Current raters' business practices
- Raters' perceptions of the current market for home energy ratings
- How raters' practices and perceptions differ across urban and rural areas

TRC identified 111 unique raters in the Northwest, most of whom have been working in the field for over five years. Interviews and surveys revealed that both raters and the organizations that certify and support home energy raters believe that the market for home energy rating services will grow due to Inflation Reduction Act (IRA) funds incentivizing above-code homes. While raters report using similar business practices in both urban and rural areas, they perceive less demand for their services in rural areas.

The final report is available on neea.org.

MRE Scientist: Meghan Bean
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Montana Residential Code Compliance Evaluation

Residential Codes | **REPORTING**

NEEA contracted with IEc to review assumptions underlying its estimation of energy savings resulting from NEEA's and its partners' involvement in the Montana state code processes. Using data collected through permit review, site visits to residential new construction building sites, and interviews with market actors, this research will address the following objectives:

- Assess statewide compliance with selected code requirements among single-family homes built under IECC 2018 and 2021 with Montana amendments.
- Develop estimates of statewide energy code compliance and compliance within urban and rural jurisdictions separately.
- Provide statewide findings regarding primary space and water heating fuel and above-code elements using data collected on individual code requirements.

This work kicked off in Q1 2023 but paused in mid-2023 due to challenges with collecting permit data. The project re-launched in January 2024 with a new data collection plan that relies on on-site data collection. A final report is expected in Q2 2025.

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Oregon Residential Code Compliance Evaluation

Residential Codes | **REPORTING**

NEEA contracted with IEc to review assumptions underlying its estimation of energy savings resulting from NEEA's and its partners' involvement in the Oregon state code processes. This evaluation will:

- Assess statewide compliance among single-family homes built under the 2021 Oregon Residential Specialty Code (ORSC).
- Provide statewide findings regarding primary space and water heating fuel and above-code elements using data collected on individual code requirements.
- Provide an analysis of builders' choices regarding compliance pathways and efficiency level to which the home is built.

IEc will collect data from permits, conduct site visits to residential new construction building sites, and conduct interviews with market actors. In addition, NEEA contracted with NMR Group to collect data on inhabited homes using homeowner self-audits. These data will be provided to IEc for analysis.

This project kicked off in February 2024, and a final report is expected in Q2 2025.

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Idaho Commercial New Construction Code Compliance Evaluation

Commercial Codes | **FIELDING**

The Idaho Commercial New Construction Code Evaluation study focuses on (a) assessing the path(s) by which and degree to which code compliance is achieved with the amended 2018 International Energy Conservation Code (IECC) in newly constructed 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. The results of the study will provide direction to the development and implementation efforts of the NEEA Codes team and will provide other regional code stakeholders guidance in targeting their energy efficiency work in the commercial new construction sector.

NEEA contracted with Opinion Dynamics to undertake this study. 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 in order to validate the accuracy of permit data. The project kicked off in Q3 2023, with planning and sample development continuing through Q1 2024. Data collection focusing on desk review of permit data began in Q2 2024 and is scheduled to conclude in Q1 2025, with site visits to a subsample of buildings scheduled for Q1 2025. This study includes analysis of billing data. Collection of this data is planned to continue through Q2 2025, with analysis and report preparation to follow.

A final report is anticipated in Q3 2025.

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Montana Commercial New Construction Code Compliance Evaluation

Commercial Codes | REPORTING

The Montana Commercial New Construction Code Evaluation study focuses on (a) assessing the path(s) by which and degree to which code compliance is achieved with the 2018 IECC in newly constructed 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. The results of the study will provide direction to the development and implementation efforts of the NEEA Codes team and will provide other regional code stakeholders guidance in targeting their energy efficiency work in the commercial new construction sector.

NEEA contracted with Michaels Energy to undertake this study. 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, supplemented by telephone or virtual interviews with building owners and operators to contextualize and enrich the results of permit and plan analysis. The study also includes virtual or in-person site visits planned for a subsample of participating buildings in order to validate the accuracy of permit data. The project kicked off in mid-Q2 2022, with planning and sample development continuing through Q1 2023. Data collection, including interviews with site contacts and desk review of permit data, commenced in Q2 2023 and concluded in Q2 2024, while in-person/virtual site visits commenced in Q4 2023 and concluded in Q2 2024. Billing data collection was attempted for this study but has been excluded from ongoing project activities due to a prohibitively low response rate from eligible building contacts.

Compliance analyses were completed in Q4 2024; a final report outlining the result of compliance analysis and comparative site visits was completed in Q4 2024 and is available on neea.org.

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Ductless Heat Pump Market Diffusion Evaluation, Year 3 | REPORTING

NEEA actively worked to accelerate adoption of Ductless Heat Pumps (DHPs) in the Northwest from 2008 to 2020. Once NEEA scales back investments in a Market Transformation program, the organization continues to monitor market diffusion of the energy-efficient product or practice through a series of annual longitudinal evaluations called market diffusion evaluations. NEEA contracted with OWL Research Partners to conduct the third diffusion evaluation study for the DHP program. The study kicked off mid-November 2024. The objective for this evaluation, consistent with the prior two diffusion evaluation studies, is to track diffusion of DHPs across the Northwest's residential HVAC market, specifically within the program's three target markets to confirm whether market transformation outcomes are being sustained.

A key activity of the study has been to conduct phone surveys with HVAC installers. The HVAC installer survey seeks to understand trends in DHP installations, the types of homes they are being installed in, the percentage of incented installations, total customer cost, and changes in the DHP market.

The survey aimed to gather responses from 232 installers across the Northwest and was wrapped up in February 2025. Survey response analysis and related secondary data analysis are ongoing.

The final report is anticipated in Q2 2025.

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