

2024 Q3

Market Research & Evaluation Quarterly Newsletter

WHAT'S NEW:



Welcome to another issue of NEEA's Market Research and Evaluation quarterly newsletter!

Thank you for taking time to read over the team's plans for the fourth quarter. The end of the year is busy, with at least 15 studies in the field. Seven others are wrapping up and anticipating final reports. Evaluations are being fielded across nearly all of NEEA's Product Groups, including Market Progress Evaluation Reports (MPERs) for NEEA's two commercial HVAC programs, Luminaire Level Lighting Controls, Extended Motor Products and a few other programs. There are also a few market research efforts underway, including research into the market for agricultural pumps, a study of consumer use and attitudes toward connected consumer products, and research with home energy raters. These market research efforts deliver real time market insights that help develop strategy for new product markets or new applications of current products into NEEA's Market Transformation programs.

And finally, NEEA just launched a research project to compare and contrast market attributes across the region's rural, suburban, and urban areas to begin to understand whether and where there might be opportunities for more accurate characterization of the region's markets. The team is enlivened by the variety of research and evaluation topics being investigated to support the alliance's important work.

Thank you for your partnership, and please be in touch with your ideas and questions. Enjoy the fall!

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

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At a Glance


MARKET RESEARCH & EVALUATION PROJECTS

Regional Studies

Integrated Systems

Products

	PLANNING*	FIELDING*	REPORTING*
Northwest Market Characterization		✓	
Efficient Fans: <i>Fan Manufacturer Representative and Specifier Market Research</i>		✓	
Efficient Rooftop Units: <i>Market Progress Evaluation Report #1</i>		✓	
High-Performance HVAC: <i>Market Progress Evaluation Report #1</i>		✓	
Extended Motor Products: <i>Market Progress Evaluation Report #1</i>		✓	
Extended Motor Products: <i>Agricultural Pumps Market Research</i>		✓	
Luminaire Level Lighting Controls: <i>Market Progress Evaluation Report #3</i>		✓	
Lighting Strategy: <i>Exterior Luminaire Level Lighting Controls in Parking Lots</i>		✓	
High-Performance Windows: <i>ENERGY STAR Influence Study</i>			✓
Retail Product Portfolio: <i>Market Progress Evaluation Report #3</i>	✓		
Retail Product Portfolio: <i>Connected Consumer Products Market Research</i>		✓	
Heat Pump Water Heaters: <i>Installer Call Back Research</i>		✓	
Advanced Commercial Gas Water Heaters: <i>Market Research on Existing Water Heaters in Select Commercial Buildings</i>			✓
Efficient Gas Water Heaters: <i>Condensing Gas Water Heater Qualitative Market Research</i>			✓

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

Long-Term Monitoring & Tracking

		PLANNING*	FIELDING*	REPORTING*
Standards: <i>Battery Chargers Standard Evaluation</i>			✓	
Standards: <i>Portable AC and Air Compressor Standard Evaluation</i>			✓	
Codes: <i>Codes Savings Baseline and Key Assumptions Review</i>			✓	
Codes: <i>Market Progress Evaluation Report #6</i>			✓	
Codes: <i>Assessment of Alternative Approaches to Estimating NEEA's State Energy Codes Influence</i>				✓
Residential Codes: <i>Home Energy Raters Market Research</i>	 / 		✓	
Residential Codes: <i>Idaho Residential Code Compliance Evaluation</i>	 / 			✓
Residential Codes: <i>Montana Residential Code Compliance Evaluation</i>	 / 			✓
Residential Codes: <i>Oregon Residential Code Compliance Evaluation</i>	 / 		✓	
Commercial Codes: <i>Idaho Commercial New Construction Code Compliance Evaluation</i>			✓	
Commercial Codes: <i>Montana Commercial New Construction Code Compliance Evaluation</i>				✓
Ductless Heat Pump Long-term Monitoring and Tracking, Year 3			✓	

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



Northwest Market Characterization

FIELDING

NEEA contracted with a team led by LD Consulting to conduct a research project that will support [NEEA's Cycle 7 \(2025-2029\) Business Plan](#). The objective of the study is to contrast and compare characteristics of rural, suburban, and urban markets (such as consumer purchasing behaviors and spending patterns, building stock, and workforce features) to identify market transformation strategies that will accelerate the delivery of program benefits to rural markets. The study will take a mixed method approach, beginning with an analysis of existing data resources to characterize consumer behavior and supply chain practices. Interviews with consumers and other market actors will explore themes uncovered in the quantitative analysis, with participants drawn from county clusters – a sample design that will derive insights through comparisons of consumers and supply chain market actors in similar locales. The study will include participatory approaches where research participants are invited to receive, verify and help contextualize findings. This project launched in August 2024, and a final report is expected by the end of the year.

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Fan Manufacturer Representative and Specifier Market Research

Efficient Fans

FIELDING

NEEA is planning a market research study in support of continued refinement of the Efficient Fans program design and intervention strategy. The study will focus specifically on addressing the following objectives, which are liable to change prior to finalization:

- Identify and document firmographic information regarding (a) regionally active sales representative firms for 6–8 specific fan manufacturers identified through prior market research and evaluation studies as having particular relevance to Efficient Fans program efforts, and (b) regionally active specifiers of commercial and/or industrial fan systems.
- Identify and document key challenges and “pain points” encountered by manufacturer representatives and specifiers throughout the fan specification and selection process.
- Clarify fan system terminology preferred by and resonant among market actors.

Study methods are likely to include secondary research accompanied by primary data collection (e.g., in-depth interviews, electronically administered surveys) to seek input and insight from regionally active fan specifiers and manufacturer representatives. The project kickoff is anticipated in Q4 2024.

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Market Progress Evaluation Report #1

Efficient Rooftop Units (RTU)

FIELDING

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.
- 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 Q3 2024, the evaluation team plans to conduct focused interviews with a small number of manufacturer representatives active in the Northwest RTU market. The evaluation team will also review NEEA documentation and materials related to identified market progress indicators.

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, with a final report anticipated in Q1 2025.

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Market Progress Evaluation Report #1

High-Performance HVAC

FIELDING

As of late 2022, NEEA's High-Performance HVAC program is intervening to transform the market for very high efficiency 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 Market Progress Indicators.
- 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. In Q3 2024 we will plan and facilitate the fourth of five Synthesis Sessions with NEEA High-Performance HVAC program staff regarding preliminary findings from these data collection activities and prepare for final activities supporting the assessment of the program's Market Progress Indicators. This includes the market actor interviews to address gaps in Market Progress Indicator (MPI) knowledge.

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 fall 2024, with a final report anticipated in Q4 2024.

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Market Progress Evaluation Report #1

Extended Motor Products (XMP)

FIELDING

NEEA contracted with ADM Associates, Inc., to field the inaugural XMP Market Progress Evaluation Report (MPER), which serves as the first evaluation of the program's Market Transformation efforts. The program's overarching objectives for the study are to:

- Review the XMP Market Transformation Theory, Program Logic Model, and Market Progress Indicators (MPIs) to assess their clarity and alignment in conveying (1) the program's strategy and planned activities to overcome market barriers and drive market changes that will increase efficient clean-water pump and circulator adoption, and (2) NEEA's proposed approach for evaluating XMP market progress.
- Conduct the first year of tracking MPIs to lay the groundwork for year-over-year evaluation, and report progress on several near-term outcomes.

A project kick-off was held in January 2024, followed by sample development and instrument preparation. Data collection began in late Q1 2024 with interviews with NEEA XMP program staff, implementation contractors, and industry partners, continuing through Q2 and into Q3 2024 with the administration of surveys or interviews across multiple market actor groups (including pump and circulator manufacturers' representatives, distributors, specifiers, contractors and project owners). Data analysis is expected to begin in Q3 2024 and will continue through Q4 2024. A final report is anticipated in late Q4 2024.

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Agricultural Pumps Market Research

Extended Motor Products (XMP)

FIELDING

In order to support ongoing program planning and opportunity assessment, NEEA intends to field a research study exploring the dynamics of the agricultural pump market across NEEA's four-state region. Specific study 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.
- 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.

Study methods are likely to include secondary research accompanied by primary data collection (e.g., in-depth interviews, electronically administered surveys) to seek input and insight from professionals active in this market. An RFP is currently under development and is anticipated to be released in Q3 2024; the project kickoff is anticipated for early Q4 2024.

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Market Progress Evaluation Report #3

Luminaire Level Lighting Controls (LLLC)

FIELDING

NEEA is planning to launch a third MPER for its LLLC program in Q3 2024. This study is crucial for tracking changes in the market that indicate whether the LLLC program is effective in overcoming identified market barriers. Interviews and surveys will be collected at the end of 2024 and into 2025 with stakeholders, manufacturers, installers, designers, architects, engineers, and 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 Q2 2025.

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Exterior Luminaire Level Lighting Controls in Parking Lots

Lighting Strategy

FIELDING

NEEA is considering adding exterior LLLC in parking lots to the LLLC program. To support this, NEEA is planning to conduct a study that 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 existent 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.

Interviews with decision makers for exterior parking lot lighting upgrades will be conducted in Q3 2024. A report is anticipated in Q4 2024.

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ENERGY STAR Influence Study

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 letter 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 will engage in document review and conduct interviews with PAWS members, NEEA staff, and ENERGY STAR representatives in Q3 2024 with a final report anticipated in Q4 2024.

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Products

Innovation to Action

Market Progress Evaluation Report #3

Retail Product Portfolio (RPP)

PLANNING

NEEA is preparing to release an RFP in support of the third MPER for its RPP initiative. This study will include ongoing assessment of key MPIs for each product in the portfolio, including documentation of NEEA and its partners' influence on recent federal standards and secondary research on the value of efficiency labels. The RFP is anticipated to release in late Q3 2024. The study kickoff is currently targeted for late Q4 2024.

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Connected Consumer Products Market Research

Retail Product Portfolio (RPP)

FIELDING

NEEA has contracted with Level 7 to conduct market research that will assess consumers' use of and attitudes toward purchasing connected consumer products in the Northwest. Primary and secondary research will be fielded during Q3, 2024 and will consist of a literature review and data collection from end-use customers (including online surveys, discussion boards, and focus groups). Final reporting is expected in Q1 of 2025.

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Products

Innovation  Action

Installer Call Back Research

Heat Pump Water Heaters (HPWH)

FIELDING

NEEA contracted with Lieberman Research to conduct research to better understand installer perception related to customer call backs regarding their HPWHs. The key objectives are to:

- Understand if they receive callbacks, the frequency of callbacks, and the nature of the issues at hand.
- Understand how installers resolve the problems.
- Identify the types of training support installers may need to minimize these situations in the future.

Data collection began in late Q2 2024, and a final report is anticipated in late Q4 2024.

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Market Research on Existing Water Heaters in Select Commercial Buildings

Advanced Commercial Gas Water Heaters

REPORTING

NEEA contracted with Lieberman Research to conduct research in a select group of buildings regarding current water heating systems, including the decision making and purchase process, value propositions and barriers to their adoption.

Data collection, which started in late Q2 2024, will continue through Q3 2024 and will result in a final report anticipated for early Q4 2024.

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Condensing Gas Water Heater Qualitative Market Research

Efficient Gas Water Heaters

REPORTING

NEEA contracted with ILLUME Advising, LLC to conduct research to better understand the purchase motivators among owners of the most efficient currently available gas storage water heaters (condensing gas water heaters) across North America. This qualitative research will inform the Efficient Gas Water Heater program's future efforts and development of the value proposition for commercialization of residential gas heat pump water heaters. The key objectives of the qualitative research effort are to:

- Understand purchaser behaviors and attitudes that result in the actual purchase and installation of highly efficient condensing gas storage units in their homes
- Understand purchasers' overall satisfaction with the unit and interaction with the unit
- Determine purchaser willingness to replace current units with newer, more efficient units and, if willing, under what scenarios (planned replacement, failure, etc.)

Data collection began in Q2 2024, and a final report is anticipated in early Q4 2024.

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Battery Chargers Standard Evaluation

Standards

FIELDING

NEEA's Codes and Standards team engaged in efforts to increase the stringency of the battery chargers standard. 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 (U.S. DOE) timeline for publishing the final rule. Michaels Energy is re-launching the project in August 2024, at which point they will review NEEA records and publicly available documents and will conduct interviews with key stakeholders from NEEA, U.S. DOE and other organizations. A final report is anticipated in Q4 2024.

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Portable AC and Air Compressor Standard Evaluation

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 will kick 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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Codes Savings Baseline and Key Assumptions Review

Codes

FIELDING

NEEA is developing an RFP for a third-party to conduct a review of its Naturally Occurring Baselines for commercial and residential energy codes in each Northwest state, as well as selected key assumptions associated with the estimation of residential and commercial code savings resulting from NEEA's energy code support activities. Specific assumptions include (note that additional assumptions may be identified as part of the research scoping process):

- The assumption that NEEA's intervention in a state's code process accelerates adoption of more efficient energy code measures by 10 years (approximately two code cycles).
- The assumption that it takes approximately one year from the construction start date for a commercial building to be complete.
- The schema NEEA has developed for mapping inconsistent commercial building categories across relevant datasets (e.g., Dodge Construction Network, DOE).

NEEA anticipates this model review to be kicked off in Q4 2024, with a final report published in Q1 2025.

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Codes, Standards, New Construction

Innovation  Action

Market Progress Evaluation Report #6

Codes

FIELDING

NEEA released a RFP in support of 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 conducted by ADM Associates and will include ongoing assessment of NEEA's progress in the Northwest codes market relative to recently established MPIs. Additional study objectives will be determined during the scoping process. The study kickoff is currently targeted for late Q3 2024.

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Assessment of Alternative Approaches to Estimating NEEA's State Energy Codes Influence

Codes

REPORTING

NEEA has contracted with NMR Group to conduct a review of several alternative approaches to evaluating NEEA's influence on the outcomes of state energy code processes. The review considers NEEA's efforts in both commercial and residential codes, and in each of the four states in the region (Idaho, Montana, Oregon, and Washington). The objective of this assessment is to support NEEA in identifying ways to assess its codes influence that more accurately document and describe the multiple workstreams of NEEA's market transformation approaches. The study includes two major activities:

- A review of current codes evaluation methods.
- An assessment of the feasibility and merit of several alternatives to the current approach.

In Q1, NMR completed interviews with NEEA staff familiar with NEEA's role in influencing state energy codes. In Q2, NMR finalized its assessment of four alternative approaches put forth by NEEA research and evaluation staff and presented its draft recommendations to NEEA's cost-effectiveness and evaluation advisory committee (CEAC). A final report summarizing study findings, including input from NEEA's CEAC members, is expected in Q4 2024.

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Home Energy Raters Market Research

Residential Codes

FIELDING

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

This project kicked off in February 2024, and a final report is anticipated in Q3 2024.

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Idaho Residential Code Compliance Evaluation

Residential Codes

REPORTING

NEEA contracted with Industrial Economics, Inc. (IEC) to review assumptions underlying its estimation of energy savings resulting from NEEA's and its partners' involvement in the Idaho 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 with Idaho 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.

Energy modeling analysis indicated that 97.8% of homes built under IECC 2018 with Idaho amendments comply with the code and that external wall insulation has the lowest rate of compliance and the highest potential for energy savings if non-compliant homes were brought to code-minimum levels. The study also found that a large majority of homes built under IECC 2018 with Idaho amendments have gas primary space and water heating. A final report is available on neea.org.

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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 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 Q4 2024.

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Oregon Residential Code Compliance Evaluation

Residential Codes

FIELDING

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, site visits to residential new construction building sites, and 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 Q4 2024.

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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 mid-Q3 2023, with planning and sample development continuing through Q1 2024. Data collection focusing on desk review of permit data is scheduled to commence in Q2 2024 and conclude in Q4 2024. This study includes analysis of billing data; collection of this data is planned to continue through early Q4 2024, with analysis and report preparation to follow.

A final report is anticipated in Q4 2024.

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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 are currently underway; a final report outlining the result of compliance analysis and comparative site visits is anticipated in late Q3 or early Q4 2024.

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Ductless Heat Pump Long-Term Monitoring and Tracking, Year 3

FIELDING

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 long-term monitoring and tracking (LTMT) studies. In Q4 2024, NEEA will contract with a third-party evaluator to conduct the third LTMT study for the Ductless Heat Pump (DHP) Market Transformation program. NEEA actively worked to accelerate adoption of DHPs in the Northwest from 2008 to 2020. The objective for this evaluation, consistent with the prior two LTMT studies, is to track diffusion of DHPs across the Northwest's residential HVAC market, specifically within the program's three target markets. This evaluation will track pre-defined diffusion indicators to confirm whether market transformation outcomes are being sustained. NEEA aims to launch this evaluation in Q4 2024 with a final report anticipated in Q2 2025.

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TOGETHER We Are Transforming the Northwest

