2025 Operations Plan

Organizational Priorities, Planned Market Transformation Program Activities and Budget

Final (April 2025)

700 NE Multnomah Street, Suite 1300, Portland, OR 97232
neea.org | 503-688-5400

Table of Contents

Executive Summary

NEEA's 2025 Operations Plan outlines goals and activities for the first year of its 2025-2029 business cycle. In 2025, NEEA is focused on driving market change leading to energy efficiency in the region. In addition, NEEA will explore evolving efficiency opportunities around load flexibility, dual-fuel products and ensuring that the benefits of Market Transformation reach all Northwest customers.

As a regional organization, NEEA has a responsibility to deliver a portfolio that balances the needs of all its funders and delivers value across the region. In 2025, NEEA will continue to represent the full breadth of Northwest needs to the market and maintain a portfolio of Market Transformation initiatives that delivers benefits to all four states.

Goals and Focus Areas Include:

- Exploring emerging opportunities in commercial space heating, commercial and multi-family water heating, dual-fuel HVAC, residential room air conditioners, clothes dryers, and power drive systems.
- Expediting market interventions to unlock energy savings sooner, while balancing the need for long-term pipeline development.
- Emphasizing opportunities that contribute to peak load reduction, including incorporating peak as a portfolio decision-making criterion in NEEA's core portfolio.
- Conducting research to better understand distinct market and supply chain characteristics of urban, suburban, town and rural customers and where there might be distinct barriers or unique opportunities for energy efficiency.
- Increasing regional adoption of heat pump water heaters and focusing on barriers to market acceptance of the future federal standard, including among populations with low levels of adoption.
- Shifting the focus of the natural gas portfolio toward commercial, dual-fuel, and fuel-neutral opportunities and advancing at least one new dual-fuel or fuel-neutral opportunity into the portfolio.
- Providing support for new construction compliance activities in rural areas across the region.
- Fielding the 2025 Commercial Building Stock Assessment and planning for the Motor-Driven System Stock Assessment.
- Conducting limited sub-regional activities to address barriers that may be unique to certain geographic areas.
- Executing specially funded projects which are funded by a sub-set of NEEA's core funders: Commercial Whole Buildings, End Use Load Flexibility, and End Use Load Research.

Portfolio Energy Savings: NEEA's Cycle 7 Business Plan expects to deliver between 190-225 average megawatts (aMW) of Co-Created energy savings between 2025-2029. Co-Created natural gas savings in Cycle 7 are estimated between 6-17 million therms. NEEA will refine these forecasts each year of the business cycle.

Operational Budget: The **2025 Operations Plan budget is $50.2 million** which includes budgeted expenditures for electric portfolio activities ($38.7M), natural gas portfolio activities ($5.9M), and non-core funding ($5.5M). Detailed 2025 budget tables begin on page 22.

The Northwest Energy Efficiency Alliance (NEEA) is an alliance of more than 140 electric and natural gas utilities and energy efficiency organizations working on behalf of Northwest energy consumers to increase the adoption of energy-efficient products services and practices.

Mission: To catalyze the most efficient use of energy for a thriving Northwest.

Purpose: NEEA is an alliance of utilities and partners that pools resources and shares risks to transform the market for energy efficiency to the benefit of all consumers in the Northwest.

Introduction

NEEA's 2025 Operations Plan identifies and prioritizes key opportunities for the first year of NEEA's 2025-2029 business cycle. Guiding this annual operations plan are NEEA's 2025-2029 Business Plan and its four strategic goals.

2025-2029 Strategic Goals:

1. Transform Markets for Energy Efficiency.
2. Accelerate the Adoption of Grid-Enabled End-Use Technologies through Market Transformation.
3. Advance Strategies to Reduce Greenhouse Gas Emissions through Market Transformation.
4. Advance the equitable delivery of energy efficiency benefits to Northwest consumers through Market Transformation.

NEEA's first strategic goal affirms energy efficiency Market Transformation as NEEA's highest value to the region and its primary objective. Goals two through four recognize the growing and changing value of energy efficiency to the energy system and the imperative to ensure that Market Transformation benefits all customers in the Northwest. They also create opportunities for NEEA to support the regional energy system in new ways as utilities and energy efficiency organizations confront challenges related to resource adequacy, resilience and meeting state energy policy goals.

Progress Toward Strategic Plan Goals

In Cycle 7 (2025-2029), **NEEA's highest priority is energy efficiency Market Transformation** and NEEA will focus its efforts on delivering market change that leads to energy efficiency. In addition, NEEA will explore evolving efficiency opportunities around load flexibility, dual-fuel products and regional value delivery that align with NEEA's purpose, mission, and core competencies and deliver benefits for electric and natural gas utilities, energy efficiency administrators, businesses and consumers throughout the Northwest.

Goal #1: Transform Markets for Energy Efficiency.

2025 Context and Assumptions:

In 2025, NEEA is focused on key priorities identified in the business plan, including balancing near-term energy savings with long-term pipeline development, prioritizing efficient technologies that save energy at peak, and expediting market interventions where possible to unlock energy savings sooner. As the natural gas

portfolio grows and the focus shifts to dual-fuel and fuel neutral work, NEEA is making changes internally to ensure integrated and holistic management of both portfolios. High level focus areas are described below, and additional detail is provided throughout NEEA's Operations Plan.

Focus Areas:

- Adaptively manage programs to meet goals and look for new opportunities within programs to prioritize peak or accelerate energy savings.
- Integrate the management of the gas and electric portfolios to find efficiencies, optimize resourcing across both portfolios, and streamline market engagement.
- Support sub-regional needs to ensure that value is delivered fairly across the region, including leveraging NEEA's initiative lifecycle (ILC) process as a tool to formally recognize and consider regional variation in market adoption.
- Grow strategic partnerships and NEEA's influence as a national leader in Market Transformation.
- Scan for emerging energy efficiency opportunities to ensure a robust pipeline of long-term savings for the region.
- Work with the Regional Portfolio Advisory Committee (RPAC) to add peak as a portfolio metric to guide electric portfolio advancement decisions.

Progress Indicators: By the end of 2025, NEEA will be tracking to its Cycle 7 business plan estimates. Peak load contribution will be a criterion in the electric scanning and portfolio decision making. Natural gas and electric portfolio management will be integrated. NEEA's ILC process will formally include a voting milestone prior to a program exiting a market.

Goal #2: Accelerate the Adoption of Grid-Enabled End-Use Technologies through Market Transformation.

2025 Context and Assumptions:

During the Cycle 7 strategic planning process, NEEA's Board identified load flexibility as a priority for the region's energy system and Market Transformation as a tool to accelerate the adoption of grid-enabled end use technologies. This goal is addressed through NEEA's upstream work in the market to advance technologies that are both efficient and demand-response enabled. It's also addressed through specially funded work that is primarily focused on load flexibility benefits. For example, in 2024, NEEA launched a two-year specially funded project to align the region around load flexibility opportunities, test Market Transformation strategies for connected products and conduct research to prioritize further opportunities and develop customer insights. This initial project is scheduled to wrap-up in 2025.

2025 Focus Areas:

- Identify and track new products and technologies that offer flexible load opportunities across all of NEEA's product groups.
- Continue to investigate the trend toward integrated systems (e.g., lighting controls integrated with HVAC) and the continued prevalence of connected devices in the home, both with the capability of providing flexible load solutions.

- Complete the second year of the specially funded two-year End Use Load Flexibility project, including: finalizing connected water heater and line voltage thermostat studies, concluding market research and defining the scope and scale of expanded end use load flexibility activities for potential funding during 2026-2029.

Progress Indicators: By the end of 2025 the two-year End Use Load Flexibility project will be wrapping up and participants will have aligned around a long-term portfolio of work for the region.

Goal #3: Advance Strategies to Reduce Greenhouse Gas Emissions through Market Transformation.

2025 Context and Assumptions:

Market Transformation offers a unique approach to support state-level energy policy goals by connecting the market to policy drivers and helping to align product development roadmaps with the anticipated regional needs of the future. In 2025, NEEA is working to advance dual-fuel (gas and electric) systems, which offer a pathway to greater energy system efficiency in addition to peak reduction and load flexibility benefits. NEEA's work will focus on evaluating the performance of the technology and understanding how additional benefits could be realized for both the gas and electric energy systems.

2025 Focus Areas:

- Advance at least one new dual-fuel or fuel-neutral opportunity into the natural gas portfolio via a Natural Gas Advisory Committee (NGAC) vote.
- Conduct a demonstration validating the efficiency of and potential for cutting-edge dual-fuel HVAC systems to serve as a resource for consumers, utilities and the region's energy grid.
- Continue to track and report the carbon emissions reductions associated with NEEA's portfolio of electric and natural gas programs to support state-level energy policy goals and reporting needs where they exist.
- Work with NEEA's Board to identify and align on additional priorities within this strategic goal.

Progress Indicators:

A residential dual-fuel/ fuel-neutral program will advance into program development in 2025. The dual-fuel demonstration will be underway with units installed and monitoring in progress. NEEA staff will have a roadmap in place for this goal for the remainder of Cycle 7.

Goal #4: Advance the equitable delivery of energy efficiency benefits[1] to Northwest consumers through Market Transformation.

2025 Context and Assumptions:

During the Cycle 7 business planning process, the Board recognized the need to ensure that the benefits of Market Transformation are delivered to all Northwest customers across the region. NEEA staff and the Board also identified some barriers and needs to be addressed before the organization could develop a comprehensive approach, including more understanding of the barriers faced by Northwest communities and shared regional goals for this work, including agreed upon definitions and any additional metrics. The Board directed staff to spend the first two years of the business cycle working to better understand these barriers and needs to inform a mid-cycle assessment for the Board to consider.

2025 Focus Areas:

- Conduct research to better understand distinct market characteristics and supply chain characteristics of urban, suburban, town and rural customers and where there might be distinct barriers or unique opportunities for energy efficiency. Survey Northwest utilities to understand their programs and approaches to delivering energy efficiency benefits to all customers with the goal of identifying any gaps and ways to avoid overlap.
- Continue to explore incremental opportunities to ensure the benefits of Market Transformation reach all Northwest consumers
- Participate in a national coalition funded by the U.S. Department of Energy to establish a rural codes collaborative.
- Work with NEEA's Board to identify and align on additional priorities within this strategic goal.

Progress Indicators:

By the end of 2025, the Board and NEEA staff will have aligned on research targets, timing and expectations for the mid-cycle action plan. NEEA will have a greater understanding of local utility efforts to deliver energy efficiency benefits to all consumers.

External Environment & Risk Management

NEEA is tracking and managing several trends and change drivers, which could create new areas of opportunity for the alliance in 2025 or affect the organization's ability to deliver on its strategic goals.

Growing Pace of Innovation – Over the last few years, national investment in research and development for new energy-efficient technologies has risen steadily. This influx of spending, along with updated testing methodologies and standards, have spurred innovation especially for heating and cooling applications, connected devices, and technologies that provide flexibility to customers and utilities. To keep up with this

[1] 'Equitable distribution of benefits' is statutory language that appears in the 1980 Northwest Power Act directing the BPA Administrator to ensure equitable distribution of conservation and resource acquisition benefits across the region. NEEA's 2025-2029 Strategic and Business Plans direct NEEA staff to work with the Board to develop specific metrics, goals and definitions under this goal.

innovation, NEEA is collaborating with partner organizations across the country to aggregate market influence, share learnings and best practices and align efforts in the market.

Diverging regional priorities – Across the region, regulatory requirements, customer expectations, and utility system needs are increasingly diverging. As a regional organization, NEEA has a responsibility to deliver a portfolio that balances the needs of all its funders and delivers value fairly across the region. In 2025, NEEA will continue to represent the full breadth of Northwest needs to the market and maintain a portfolio of Market Transformation initiatives that delivers benefits to all four states. NEEA staff will also implement a key change to the Initiative Lifecycle process, to formally recognize and consider regional variations in market adoption prior to ceasing active market interventions in any Market Transformation programs.

Dynamic policy environment for natural gas – Tensions between electrification, customer choice and affordability considerations are continuing in the region. This dynamic is likely to play out over the next several years with uncertain impacts to NEEA's work. NEEA is focusing on commercial, dual-fuel and fuel-neutral measures in Cycle 7 – prioritizing work that will deliver long-term value to the region in multiple decarbonization scenarios. NEEA is also closely monitoring the impacts that state-level energy policies have on the market for energy-efficient technologies so that it can adapt program strategies as barriers shift or emerge.

Unexecuted funding agreements – At the time that the 2025 Operations Plan is being developed, several funding contracts for Cycle 7 have yet to be executed. NEEA staff are working closely with the Board to have these contracts in place by the end of the year. However, it is possible that some will not be finalized until the first quarter of 2025. To mitigate this cash flow uncertainty, NEEA staff have developed a conservative operations plan that can be delivered within the most likely scenario for available resources. Once all funding contracts are finalized, NEEA staff will revisit annual planned activities to determine if a budget increase is warranted. Board approval is required for NEEA's Executive Director to authorize an increase in spending greater than two percent above the approved operations plan for either Electric or Gas.

Economic headwinds — Although real GDP growth is appearing to cool slightly from 2023 levels (3.1%), expectations for 2025 are in-line with 2024 growth. With slightly cooler economic growth prospects, expectations are increasing that the Federal Reserve will continue to reduce interest rates, which could increase new home sales leading to more appliance sales. While global and domestic political economic risks continue to be present, the speculation of a near-to-medium-term recession has largely subsided. Were a recession to occur, the risk to NEEA's Cycle 7 goals is low given regional policies supporting energy efficiency and the continued expectation of economic injection from federal spending in the energy sector. NEEA will continue to monitor for market slowdowns in 2025 and leverage its adaptive management approach to adjust activities and budgets as needed.

Election uncertainty – November's election brings with it the unknowns of a new administration and potential shifts in federal and state priorities. The change in administration could impact federal funding flowing into the region and the pace and content of new federal standards. Historically, changes in federal administrations have had a minimal impact on NEEA's work because so much is driven at the state level. Furthermore, because NEEA's Cycle 7 Business Plan made no assumptions for federal funding, NEEA remains fairly insulated from these potential shifts. If federal standards activities slow down, then NEEA staff will pivot to focus to other activities such as voluntary standards like ENERGY STAR® to support NEEA's Market Transformation programs.

2025 Portfolio Overview

Portfolio Management Goals: Electric

Over the 2020-2024 business cycle, NEEA worked to build out a strong electric portfolio that was balanced between short- and long-term opportunities and diversified risk. In doing so, NEEA advanced six new programs. In 2025, NEEA is focused on continuing the momentum in those programs while meeting the broader set of regional needs identified in the Cycle 7 Business Plan:

- Expediting market interventions where possible to unlock energy savings sooner while balancing the need for a long-term pipeline of opportunities.
- Emphasizing opportunities that contribute to peak load reduction and support state-level energy policy goals.
- Learning where NEEA's Market Transformation work can support the distribution of benefits to all Northwest customers.

As NEEA enters the new business cycle, it will expand its decision-making criteria for future portfolio opportunities to reflect the Cycle 7 goals. NEEA is also exploring new heat pump opportunities in commercial space heating, commercial and multi-family water heating, residential room air conditioners and clothes dryers, as well as a new opportunity in power drive systems for 2026 advancement potential.

Portfolio Management Goals: Natural Gas

In Cycle 7, the natural gas portfolio will become more mature, with multiple programs in market development, while also adjusting priorities nimbly in response to changing policy and market conditions. Developed in alignment with the Board and natural gas funding utilities, NEEA will use the following principles to guide natural gas portfolio development heading into 2025:

- The portfolio will increase market adoption of affordable efficiency solutions that result in reportable gas energy savings.
- All activities and programs will be designed to align with state policies and/ or other decarbonization efforts as applicable.
- The focus of the portfolio will shift toward commercial, dual-fuel, and fuel-neutral products, systems, and practices.
- Dual-fuel equipment is included in this portfolio and qualifies due to the increased end-use efficiency and reduction in natural gas usage.

Portfolio Composition: Programs in the Electric and Natural Gas Portfolios

Figure 1 – 2025 Expected Portfolio Composition by Product Group and Maturity

Product Group	Initiative Lifecycle Phase			
	Concept Development	Program Development	Market Development	Long-Term Monitoring & Tracking
Building Envelope[2]				
Consumer Products	• Room Heat Pump Air Conditioners • Clothes Dryers • Efficient Commercial Laundry (natural gas or dual-fuel)		• Retail Products Portfolio	
HVAC	• Dual-fuel Residential HVAC • Efficient RTU expansion to dual fuel • High-Performance HVAC expansion to dual fuel		• Advanced Heat Pumps • High-Performance HVAC • Efficient Rooftop Units (Natural Gas)	• Ductless Heat Pumps
Lighting	• LLLC expansion to exterior lighting products		• Luminaire Level Lighting Controls	
Motor-Driven Products	• Power Drive Systems	• Efficient Fans	• Extended Motor Products – Pumps	
New Construction				• Manufactured Homes
Water Heating	• Central and Unitary systems	• Advanced Commercial Gas Water Heating (Natural Gas)	• Heat Pump Water Heaters	

In addition to the portfolio of Market Transformation initiatives listed above, NEEA also advances work in new building code development and market support, advances product standards that are not a part of existing Market Transformation programs, and manages two infrastructure programs, which provide critical support across multiple programs – BetterBricks and the Integrated Design Labs.

[2] NEEA is scanning for new opportunities in Building Envelope and does not currently have any programs in development or in the market.

Portfolio Value Delivery

In Cycle 7, NEEA estimates the electric portfolio will deliver between 190-225 average megawatts (aMW) of Co-Created energy savings[3]. Co-Created natural gas savings in Cycle 7 are estimated between 6-17 million therms. These estimates were published in the Cycle 7 Business Plan and will be updated annually based on progress in Cycle 7.

Figure 2 – Cycle 7 (2025-2029) Scorecard

Market Transformation Metrics		Business Plan Estimate
Electric Portfolio	5-year (2025–2029) Co-Created Energy Savings (aMW)	190–225
	10-year (2025–2034) Co-Created Energy Savings (aMW)	365–470
	5-year Carbon Reduction (thousand tons)	780–900
	5-year Winter Peak Load Savings[1] (MW)	390–475
	5-year Summer Peak Load Savings[2] (MW)	340–400
Natural Gas Portfolio	5-year (2025–2029) Co-Created Energy Savings (MM Therms)	6–17
	10-year (2025–2034) Co-Created Energy Savings (MM Therms)	10–51
	5-year Carbon Reduction[4] (thousand tons)	70–200

2025 Planned Activities by Workstream

NEEA takes a wholistic approach to Market Transformation that includes five workstreams: **Emerging Technology; Market Strategy and Execution; Codes and Standards; Analytics, Research and Evaluation; and Convene and Collaborate**. The following section details planned 2025 activities in each workstream along with administrative activities critical for supporting the organization.

Emerging Technology

NEEA routinely scans for, assesses, and reports on the potential for newly identified efficient products, services and practices. Once these opportunities are identified, NEEA works with manufacturers to encourage products that meet regional needs and truly save energy by conducting lab and field-testing and providing data to the Department of Energy and the Environmental Protection Agency to support test procedures and voluntary specifications. As a regional organization, NEEA focuses on opportunities that have broad benefits across the four Northwest states, including places that have unique barriers and opportunities for efficiency, such as rural markets and colder climates.

Over the last few years, national investment in research and development for new energy-efficient technologies has continued to rise steadily. This growth is fueled by increased federal, state, and local

[3] NEEA's Cycle 7 Co-Created energy savings estimate does not include any continued savings across the region from the diffusion of Strategic Energy Management into utility programs, though NEEA anticipates continued regional return from that savings stream.

[4] Reduction in carbon emissions is calculated at a regional level based on the amount of energy saved through the alliance's efforts to transform the market.

governments and private industry funding. Updated testing methodologies and standards have also spurred innovation, leading to record-high corporate investments in many areas, especially heat pumps for space heating and cooling as well as water heating. This investment and the following assumptions are informing the direction of NEEA's emerging technology efforts in 2025:

- **Growing Partnership Opportunities**: Regional and extra-regional organizations are benefiting from the increased technology investments. NEEA is continuing to develop collaborations with many of these organizations to expand influence with manufacturers and technology developers.
- **Accelerating Pace of Innovation**: Heat pumps have been available for decades, but the pace of innovation for efficiency for heating and cooling applications is faster than seen in recent history.
- **Continuing Market Focus on Connectivity**: The number of connected devices of all types continues to grow, increasing opportunities for flexible load control.

2025 Goals and Focus Areas

New Opportunity Scanning: NEEA scans the market for emerging energy efficiency opportunities, leveraging existing relationships with manufacturers, technology developers, utilities outside the Northwest, U.S. DOE labs, and other research and development entities. The alliance also welcomes unsolicited proposals through https://neea.org. In Cycle 7, NEEA will expand its robust pipeline to include opportunities that both offer energy savings benefits and support NEEA's Cycle 7 strategic goals. Water heating, HVAC and motor systems will be the highest priority areas with an emphasis on controls, dual-fuel systems and technologies that offer flexible load opportunities including peak load reduction. NEEA will also continue the investigation of the trend toward integrated systems, e.g. lighting controls integrated with HVAC and the continued prevalence of connected devices in the home, both with the capability of providing flexible load control solutions. Finally, NEEA will continue to participate in national collaborations for building envelope including the Department of Energy's Partnership for Advanced Window Solutions (PAWS) with a goal of supporting technology research and code advancement until another Market Transformation program opportunity is identified.

Product Management: NEEA's product management function is designed to identify, assess, and help launch programs for opportunities that will benefit the Northwest. In 2025, NEEA will introduce an expanded set of metrics to effectively manage the emerging technology portfolio and new methods to rank the benefits of each new technology. Energy savings will continue to be a focus for all product assessments, but consideration will be given to peak load management, state-level energy policy goals, and striving to deliver proportional benefits across all four states In the natural gas portfolio, NEEA will focus emerging technology efforts toward commercial, dual-fuel and fuel-neutral opportunities and continuing to engage in collaborations where NEEA can leverage investment from partners across North America such as the GTI Energy Emerging Technology Program and the North American Gas Heat Pump Collaborative.

Regional Coordination: At the regional level, NEEA tracks ongoing emerging technology activities and identifies gaps in coordination with the Regional Emerging Technology Advisory Committee (RETAC) to maximize the leverage of NEEA's budget. In Cycle 7, NEEA will continue to coordinate regional emerging technology research with RETAC on a quarterly basis and convene Product Council meetings to disseminate research findings and technology innovations.

Market Strategy and Execution

Once a new energy efficiency opportunity is identified and proven to deliver reliable energy savings, NEEA accelerates adoption of these new opportunities through its Market Transformation programs. For each program, NEEA identifies market barriers to adoption and then strategically intervenes to remove those barriers and influence decision-makers throughout the supply chain. Ultimately, this work ensures that Northwest customers have greater access to efficient products at increasingly affordable prices.

Electric Programs:

NEEA's electric portfolio is comprised of seven active Market Transformation programs – one program that is under development and six that are in the market. NEEA is not currently planning to advance any new programs in 2025, though there are several new electric and dual-fuel opportunities that are being developed and could potentially advance into the portfolio providing the right market conditions. These opportunities will be assessed against NEEA's portfolio criteria and in consultation with the Regional Portfolio Advisory Committee.

2025 Goals and Focus Areas:

- Increasing regional adoption of heat pump water heaters and focusing on barriers to market acceptance of the future federal standard, including among populations with historically low levels of adoption.
- Expediting programs where possible, including XMP – Pumps, to accelerate market change leading to more near-term energy savings, a key Cycle 7 priority identified in the Cycle 7 Business Plan.
- Prioritizing opportunities that contribute to peak load reduction and other state-level energy policy goals, including space and water heating.
- Moving the High-Performance Windows program out of the program development phase of NEEA's initiative lifecycle due to cost-effectiveness and data challenges. NEEA staff will continue to maintain some key market relationships and monitor the market and policy landscape for opportunities to re-enter the market at a future time.
- Advancing strategic account management practices to deepen relationships with Market Transformation, vendor, and supply chain organizations, increase scale for Northwest Market Transformation initiatives, and build extra-regional alignment.

Natural Gas Programs

Heading into Cycle 7, NEEA's natural gas portfolio is comprised of two active Market Transformation programs – one program in development (Advanced Commercial Gas Water Heating) and one in the market (Efficient Rooftop Units). In 2025, NEEA expects to bring at least one new dual-fuel or fuel-neutral program opportunity to the Natural Gas Advisory Committee for advancement into the portfolio. This growing portfolio will require the full suite of management processes that the electric portfolio has been utilizing and greater integration of electric and gas portfolio management.

2025 Goals and Focus Areas:

- Ramping up the scale and breadth of market interventions in the commercial Efficient RTUs (rooftop units) program and expanding it to be fuel neutral while also considering dual-fuel opportunities.
- Accelerating testing and research in the Advanced Commercial Gas Water Heating program with an eye toward entering the market development phase of NEEA's initiative lifecycle via a Natural Gas Advisory Committee vote potentially in 2026.
- Advancing at least one new dual-fuel or fuel-neutral opportunity into the portfolio via a Natural Gas Advisory Committee vote.
- Moving the residential Efficient Gas Water Heating program out NEEA's natural gas portfolio due to shifts in portfolio priorities. NEEA staff will continue to maintain some key market relationships and monitor the market and policy landscape for future opportunities for NEEA or the Northwest utilities.
- Leverage collaboration and investments from partners across North America, such as the GTI Emerging Technology Program and the North American Gas Heat Pump Collaborative.

Codes and Standards

Energy codes and equipment standards provide a unique and cost-effective opportunity to lock in energy savings and is the ultimate goal of many of NEEA's Market Transformation programs. NEEA works with state-level and national stakeholders, bringing together data, research and product performance information to advance codes and standards based on proven technologies that benefit the Northwest. Because they establish universal expectations that the market must adopt, codes and standards favoring efficiency are one the most effective ways to ensure widespread adoption of efficiency measures and provide benefits to all Northwest consumers.

For the past four years, federal standards have been a focus of the Department of Energy (DOE). Having worked through the existing backlog, DOE is now current with all required standards. For 2025, NEEA assumes that DOE will continue to address standards as they become eligible, meaning a slower pace than the last few years but steady.

For codes work in 2025, NEEA expects to continue receiving funding for its code work from the Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA). NEEA staff will continue to engage with national organizations on model codes that influence Northwest state codes. Staff expect the following activities in the four Northwest states:

- Idaho will consider updating to IECC 2024, with amendments.
- Montana will consider updating to International Code Council (IECC) 2024 with amendments.
- Oregon will continue development of its next code version.
- Washington will continue developing the commercial code and start developing the new residential code.

2025 Goals and Focus Areas

Given the assumptions outlined above, main goals for the codes and standards workstream include active engagement in a couple of key standards / coalition engagements; development of state code plans; updated/ developed codes and standards strategies for priority programs; and support for new construction compliance efforts in rural communities.

Standards: In 2025, NEEA staff will serve as technical and market experts in the U.S. DOE's standards rulemaking process. Focus areas include:

- Increasing the stringency of federal standards relevant to the Northwest.
- Completing and/ or updating three to five codes and standards strategies for each Market Transformation program.
- Increase bench of qualified contractors to support standards development activities.
- Completing and publishing the residential clothes dryer test procedure research.
- Integrating a new database for tracking standards into daily activities.
- Initiating a strategic framework for developing and managing diverse coalitions of energy efficiency advocates, manufacturers, and other industry representatives to co-create recommendations to federal appliance standards.

Codes: NEEA's wholistic support of regional and national code stakeholders includes developing energy code proposals within states and for the International Code Council (IECC), supporting code implementation, measuring compliance and market challenges and working to remove barriers to implementation (see New Construction and Training below). Focus areas include:

- Working to maintain and/ or increase the stringency of energy codes in each state to maximize the value to home buyers and commercial building owners.
- Completing state-level code roadmaps prior to the beginning of each state code development cycle.

New Construction and Training: NEEA supports the new construction market by offering training opportunities customized to each state, case studies and educational materials highlighting technologies and techniques for meeting and exceeding code, hotlines to answer questions about code, and support for the RTF new homes protocol and utility programs that provide data for code development activities. Focus areas include:

- Supporting utilities who offer performance path new construction programs and the Regional Technical Forum (RTF) new homes protocol and AXIS database.
- Ensuring residential and commercial websites as well as compliance tools are current and offer relevant content. Includes BetterBuiltNW, BetterBricks, WA code portal, and code cookbooks.
- Increasing participation in code trainings and collect feedback and information about the range of attendees.
- Understanding the workforce gap and feasible business models to support code compliance in rural communities and tribal nations in Oregon.

- Establishing, with a coalition of other organizations, a rural codes collaborative to develop, implement, and evaluate tailored programs that overcome various barriers to successfully adopting, implementing, and enforcing energy codes and efficiency programs in rural and tribal communities across the country.

Market Research and Evaluation: Researching builders' compliance with energy code and their selections of code options is a critical component for calculating savings and for understanding the effectiveness of energy code and NEEA's support activities. Goals and activities in 2025 include:

- Complete Market Progress Evaluation Report #6.
- Progress on code compliance studies.
- Complete third-party assessment of NEEA's approach to naturally occurring baseline.

Analytics, Research and Evaluation (ARE)

On behalf of the region, NEEA identifies, collects, analyzes and disseminates data, information and insight to assist decision-making and advance and report the progress value created by Market Transformation. All of NEEA's Market Transformation programs are regularly evaluated by independent third parties to understand market influence and progress and inform approaches to adaptive management. NEEA's data and analytics expertise drives Market Transformation success and provides the market and the region with insights and information unavailable from other sources. Additionally, NEEA collects market data at a regional stock level to inform market strategies, assess progress and provide validation of data used for reporting energy efficiency value metrics.

In addition to continuing to advance and deliver on NEEA's core work of transforming markets for energy efficiency, NEEA staff will work on advancing the three new Strategic Plan goals in 2025. Some specific activities include:

- Assessing dual-fuel and fuel-neutral Market Transformation opportunities and their value streams.
- Developing the peak valuation for electric portfolio decision making.
- Conducting specially funded consumer attitude research on end use load flexibility programs.
- Conduct research to better understand distinct market and supply chain characteristics of urban, suburban, town and rural customers and where there might be distinct barriers or unique opportunities for energy efficiency to support the delivery of benefits to Northwest consumers.

2025 Goals and Focus Areas by Team

Data Planning and Analytics: NEEA's Data, Planning and Market Analysis team is responsible for the full lifecycle of data-driven decision-making and management at NEEA. Key 2025 focus areas include:

- Migrating HVAC data collection to in-house to achieve cost savings and efficiencies.
- Enhancing the water heating data set and preparing the data collection strategy and structure for the Advanced Commercial Gas Water Heating program.
- Developing strategic web scraping data sets to inform consumer product pricing, stocking and behavior to deliver program insights and opportunities.

- Developing and formalizing market partner reports to enhance relationships and partnership value.
- Developing new portfolio decision making criteria for peak load reduction, data and analysis that supports the new strategies and needs of the Cycle 7 business plan.
- Developing value metrics for NEEA's load flexibility work.

Market Research and Evaluation: To measure market progress and influence over more than 25 years, NEEA has developed and continually refined an approach to evaluating Market Transformation that is grounded in best practices. NEEA conducts its evaluation and market research activities in a transparent manner, with all evaluations available to the public on https://neea.org. Methodologies are reviewed with the Cost Effectiveness and Evaluation Advisory Committee. Key 2025 focus areas include:

- Delivering reports for approximately 32 market research and evaluation studies to support Market Transformation programs and Codes & Standards efforts. See "Appendix D: 2025 Market Research and Evaluation Calendar for a detailed list".
- Supporting the Cycle 7 goal to advance the delivery of energy efficiency benefits to all Northwest consumers through Market Transformation by conducting regional research to explore themes uncovered in the 2024 research related to barriers to energy efficiency experienced by customers in rural, urban, suburban areas and towns.
- Conducting a transparent and unbiased review through a third-party of NEEA's key assumptions for the modeling of costs and benefits associated with NEEA and its partners work in state code processes in keeping with NEEA's commitment to continuous improvement.
- Providing actionable insights for the development of regional special projects through the delivery of timely and high-quality research deliverables. These special projects are supported via special funding agreements and include the End Use Load Flex and Whole Buildings projects.
- Continuing to support the evolution of NEEA's natural gas portfolio through the delivery of timely and actionable market insights for efficient gas space and commercial water heating programs, and in particular the migration toward dual-fuel and fuel-neutral program strategies.

Regional Studies: NEEA's stock assessments, which are conducted roughly every five years, and the specially funded End Use Load Research study support the region's diverse building characteristic and energy consumption data needs. Building characteristic information is collected onsite by trained engineers to ensure accuracy. The data gathered is used to uncover, measure, track and plan for new opportunities in NEEA's Market Transformation portfolio and utility energy efficiency programs. It is also a key source of information for the Power Council's five-year Power Plan and the Regional Technical Forum's energy efficiency measures. In addition, the data is used by electric and natural gas utilities to inform their conservation potential assessments and integrated resource plans. Key 2025 focus areas include**:**

- Recruiting commercial and multi-family buildings into the **2025 Commercial Building Stock Assessment (2025 CBSA)**, collecting building characteristic and energy usage data from these buildings, and beginning to develop the structure of the final datasets that will be made available upon completion of the study.
- Convening a workgroup to identify needs and approaches to incorporate into the **2027 Residential Building Stock Assessment (2027 RBSA)** and releasing an RFP before the end of the year so study implementation can begin in 2026.

- Continuing metering for the **Commercial Energy Metering Study (CEMS)** into June 2025 when metering is scheduled to end. To analyze the relative contribution to building peak demand by each metered end use, NEEA will continue to pursue access to AMI data on study participants. Data analysis will be ongoing.
- Continue metering for the **Home Energy Metering Study (HEMS)** into June 2025 when metering for residential homes is scheduled to end. A final report will be produced in Q3 2025 by Evergreen Economics. Data analysis will be ongoing.
- Convening a workgroup to identify goals and priorities for the **Motors Systems Stock Assessment (MSSA)**. Once study priorities are identified, NEEA plans to release an RFP and contract with a firm to begin study implementation in the second half of 2025.

Convene and Collaborate

NEEA regularly creates and communicates opportunities for regional energy efficiency stakeholders to share information and best practices and align on regional priorities. These activities enable the region to move the market faster and more efficiently than any one organization could do alone. NEEA's Convene and Collaborate work is led by the Corporate Strategy, Relations and Communications Division.

2025 Goals and Focus Areas by Team

Corporate Communications: Corporate Communications oversees external and internal communications, executes corporate events, and supports organizational alignment of internal strategic initiatives. Key 2025 focus areas include:

- Supporting efforts to deliver on NEEA's Cycle 7 goals through a redesigned neea.org website that delivers clear, consistent, and streamlined information to stakeholders using language and concepts that reflect the evolving needs of the region, and support the goals outlined for 2025-2029.
- Convening the region through large-scale events, such as the annual Leadership in Energy Efficiency Awards and Efficiency Exchange Conference, which provide opportunities for energy efficiency professionals to share information and best practices, network, and recognize and be recognized by their peers.
- Identifying and facilitating opportunities to provide Market Transformation thought leadership and grow NEEA's influence with the market through white papers, articles in relevant publications and conference presentations.

Corporate Strategy: Corporate Strategy is responsible for leading enterprise-wide planning initiatives, helping the organization identify and align around short and long-term goals, and tracking and communicating developments in regional and national energy policy. Key 2025 focus areas include:

- Developing organizational roadmaps for delivering on NEEA's Cycle 7 strategic goals.
- Increasing internal and alliance-wide visibility to critical policy developments to ensure portfolio alignment with state and national priorities and identify opportunities driven by new policies.
- Distilling and delivering actionable insights to staff to ensure programs and activities are aligned with a rapidly changing policy and energy system landscape and regional needs.

- Developing frameworks and avenues for efficiently and effectively identifying and scaling special projects in line with NEEA's Business and Strategic Plan goals.

Stakeholder Relations: Stakeholder Relations facilitates NEEA's advisory and coordinating committees and works with NEEA staff to enable effective regional collaboration. Key 2025 focus areas include:

- Deepening stakeholder insights to be more responsive and adaptive to regional needs during Cycle 7.
- Continuing to manage high-functioning stakeholder forums including streamlining processes and outputs based on 2024 feedback and assessing viability of new tools.
- Helping the region align around new and emerging areas of value delivery (e.g., load flexibility, dual-fuel products, etc.).

Administration

NEEA's Business Administration and Human Resources functions support the people, processes and technology required by NEEA staff to effectively achieve annual and five-year goals. Ensuring that internal processes and technologies are efficient, streamlined, and compliant allows NEEA staff to operate proficiently, efficiently, and flexibly across all Market Transformation work.

Increased headcount, special funding efforts, contract complexity, technology needs, and organizational structure changes will stretch the Administration divisions to support business needs in 2025. Also, the needs and expectations of employees have increased and diversified, requiring more hands-on support and available options.

2025 Goals and Focus Areas by Team

Business Administration: Business Administration provides key shared services for business partners within NEEA, as well as for vendors and external stakeholders. The division is comprised of three teams: Information Technology (IT), Finance and Accounting, and Contracts and Legal. Key 2025 focus areas include:

- Implementing key infrastructure and tools improvements.
- Continuing to protect NEEA's Intellectual Property.
- Continuing to improve cybersecurity, leveraging the NIST Framework.
- Supporting increased volume and breadth of NEEA program work in an efficient manner.
- Increasing internal process documentation and streamlining.

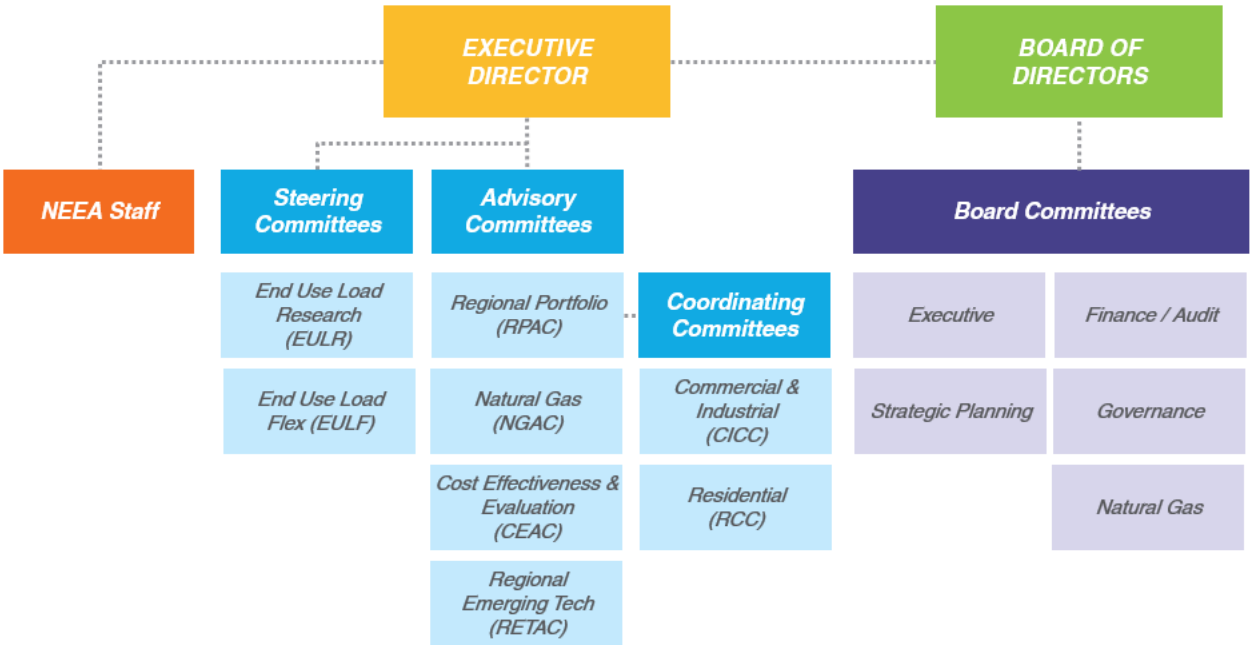
Human Resources: Human Resources is responsible for recruiting and retention, employee engagement and career development, and facilities management. Key 2025 focus areas include:

- Developing a change management center of excellence (COE).
- Increasing internal process documentation and streamlining.
- Rolling out a new talent development model.
- Supporting an evolving workforce (facilities, culture, comms, etc.).
- Supporting "Goal 4" of the Cycle 7 Strategic Plan.

Governance

NEEA staff facilitate a robust collaboration process to ensure that regional input is considered in alliance program planning and decision-making. This coordination happens at many levels throughout NEEA and funder organizations and includes NEEA's Board of Directors as well as several Board committees (see Figure 3).

Figure 3 – Alliance Governance and Committee Structure



NEEA Leadership Team

EXECUTIVE DIRECTOR: Becca Yates

NEEA LEADERSHIP TEAM:

- Kyle Burchard, Vice President, Business Administration
- Jeff Harris, Chief Transformation Officer
- Susan Hermenet, Vice President, Analytics, Research and Evaluation
- Virginia Mersereau, Vice President, Corporate Strategy, Relations and Communications
- Becky Walker, Vice President, Market Development and Transformation

2025 Operations Plan Budget

Table 1 – Comparison with 2025-2029 Business Plan by Workstream ($ Thousands)

Workstream	Electric			Natural Gas			Non-core Funding		
	1-Year Forecast	5-Year Budget	% of 5 Year	1-Year Forecast	5-Year Budget	% of 5 Year	1-Year Forecast	5-Year Budget[5]	% of 5 Year
Emerging Technology	3,375	17,733	19%	750	3,027	25%	332	0	0%
Market Strategy & Execution	15,643	91,005	17%	3,060	17,494	17%	935	20,132	5%
Codes & Standards	3,242	16,952	19%	175	1,283	14%	15	0	0%
Analytics, Research & Evaluation	8,778	48,552	18%	830	5,333	16%	3,062	1,914	160%
Convene & Collaborate	2,313	11,910	19%	10	75	13%	210	0	0%
Admin	7,416	36,789	20%	0	0	0%	33	0	0%
Allocation of Shared Services[6]	-2,032	-11,141	18%	1,091	6,088	18%	941	5,053	19%
TOTAL	38,735	211,800	18%	5,916	33,300	18%	5,528	27,099	20%

Variance Drivers:

- **Emerging Technology** – In 2025 natural gas is higher than expected expenditures in future years due to work to support opportunities for program advancement milestones within the year.
- **Market Strategy & Execution** – Market Strategy and Execution budget will ramp up during the business cycle as new electric programs are added. Gas program spending also expected to ramp up during the Cycle.
- **Codes & Standards** – Natural gas Codes and Standards spending is likely to ramp up later in the cycle when new codes and standards cycles are revisited.
- **Analytics, Research and Evaluation** – Electric and natural gas costs will ramp up during the cycle based on the timing of building stock assessments. In 2025, special funding is anticipated from the End Use Load Research, End Use Load Flexibility and Whole Buildings efforts.
- **Admin** – Admin includes fixed overhead costs, including implementation-related depreciation in 2025 for NEEAForce (relationship management system) and NetSuite upgrade.

[5] NEEA's Cycle 7 Business Plan Budget for Non-core Funding included End Use Load Research and a placeholder for yet-to-be determined work. The placeholder was assumed within Market Strategy & Execution. Variances across other workstreams are expected as projects are realized.

[6] Shared Services = Convene and Collaborate and Administration

Table 2– 2024 Forecast vs. 2025 Operations Plan Budget

By Functional Expense ($ Thousands)

	2024 Forecast				2025 Budget				
	Electric	Natural Gas	Non-core Funding	Total	Electric	Natural Gas	Non-core Funding	Total	Variance Y/Y (%)
Salary & Benefits	14,218	1,013	839	16,070	15,053	1,978	1,773	18,804	17%
G&A Professional Services	1,275	5	11	1,291	1,227	0	100	1,327	3%
Equipment & Software	734	5	0	739	738	0	0	738	0%
Travel & Professional Development	744	67	22	834	879	52	11	942	13%
Corporate Communications	320	0	68	388	345	0	0	345	-11%
Depreciation	432	0	9	440	587	0	9	596	35%
Facilities & Other	1,137	12	3	1,152	1,226	15	3	1,244	8%
Allocation of Shared Services[7]	-1,384	963	421	-0	-2,032	1,091	941	0	0%
Sub-Total G&A	17,477	2,065	1,373	20,915	18,024	3,136	2,836	23,996	15%
Programs/ Projects	19,330	2,616	2,312	24,258	20,711	2,780	2,692	26,183	8%
Total Expenses	36,807	4,681	3,686	45,173	38,735	5,916	5,528	50,179	11%

Variance Drivers:

- **Salaries and Benefits –** Budget increase assumes conservative vacancy rate compared to 2024 as well as additional head count for natural gas and special projects.
- **Depreciation –** Higher depreciation costs in 2025 related to NEEAForce (relationship management system) and NetSuite upgrade.
- **Travel and Professional Development –** 2025 budget assumes additional headcount with a conservative vacancy rate.
- **Corporate Communications –** Efficiency Exchange will be core funded in 2025. As a result, non-core funding expenses forecast in 2024 ($68K) are included in the project line of the 2025 budget.

[7] - Shared Services = Convene and Collaborate and Administration

Table 3– 2025 Operations Plan Electric Budget
By Workstream ($ Thousands)

Workstream	Expense Type	2025 Budget ($)	% of Total 2025 Budget	2024 Forecast ($)	% of Total 2024 Budget	Y/Y Variance ($)	Y/Y Variance (%)
Emerging Technology (ET)	Labor & G&A	1,575	4%	1,283	3%	292	23%
	Direct	1,800	5%	2,088	6%	-288	-14%
	TOTAL ET	3,375	9%	3,371	9%	4	0%
Market Strategy & Execution (MSE)	Labor & G&A	4,315	11%	3,811	10%	503	13%
	Direct	11,328	29%	11,142	30%	186	2%
	TOTAL MSE	15,643	40%	14,953	41%	689	5%
Codes & Standards (C&S)	Labor & G&A	1,142	3%	1,066	3%	76	7%
	Direct	2,100	5%	2,301	6%	-201	-9%
	TOTAL C&S	3,242	8%	3,367	9%	-125	-4%
Analytics, Research & Evaluation (ARE)	Labor & G&A	3,325	9%	3,604	10%	-279	-8%
	Direct	5,453	14%	3,799	10%	1,654	44%
	TOTAL ARE	8,778	23%	7,403	20%	1,375	19%
Convene & Collaborate (C&C)	Labor & G&A	2,283	6%	1,954	5%	329	17%
	Direct	30	0%	0	0%	30	0%
	TOTAL C&C	2,313	6%	1,954	5%	359	18%
Admin	Labor & G&A	3,687	10%	3,623	10%	64	2%
	Direct	3,730	10%	3,520	10%	210	6%
Allocation of Shared Services		-2,032	-5%	-1,384	-4%	-648	47%
	TOTAL ADMIN	5,384	14%	5,758	16%	-374	-6%
TOTAL		38,735	100%	36,807	100%	1,928	5%

Variance Drivers:

- **Emerging Technology –** Direct costs for a demonstration project budgeted in 2024 are not carrying over into 2025. Increase in labor is due to vacancy in 2024 and increased work in 2025.
- **Market Strategy & Execution –** Increase in labor is due to vacancy that occurred in 2024 and increased work in 2025.
- **Codes and Standards –** Direct costs for code development, website strategy development and additional code trainings due to new codes that were published in 2024 are not carrying over into 2025.
- **Convene and Collaborate** – Salaries and Benefits are increasing in 2025 because the division is fully staffed. Direct costs are related to Efficiency Exchange, which was specially funded in 2024.
- **Analytics Research and Evaluation –** Y/Y increase over 2024 is related to building stock assessments ramping up.
- **Allocation of Shared Services –** Y/Y increase as total NEEA administration costs increase as well as diversification of funding sources to which those costs are allocated.

Table 4– 2025 Operations Plan Natural Gas Budget by Workstream ($ Thousands)

Workstream	Expense Type	2025 Budget ($)	% Total of Natural Gas Budget	2024 Forecast ($)	% Total of Natural Gas Forecast	Y/Y Variance ($)	Y/Y Variance (%)
Emerging Technology (ET)	Labor & G&A	58	1%	9	0%	48	520%
	Direct	750	13%	903	19%	-153	-17%
	TOTAL ET	808	14%	913	19%	-105	-12%
Market Strategy & Execution (MSE)	Labor & G&A	1,481	25%	1,029	22%	452	44%
	Direct	1,015	17%	1,058	23%	-43	-4%
	TOTAL MS&E	2,496	42%	2,086	45%	410	20%
Codes & Standards (C&S)	Labor & G&A	56	1%	50	1%	6	13%
	Direct	175	3%	321	7%	-146	-45%
	TOTAL C&S	231	4%	371	8%	-139	-38%
Analytics, Research & Evaluation (ARE)	Labor & G&A	450	8%	14	0%	436	3,140%
	Direct	830	14%	335	7%	496	148%
	TOTAL ARE	1,280	22%	348	7%	932	267%
Convene & Collaborate (C&C)	Labor & G&A	0	0%	0	0%	0	0%
	Direct	10	0%	0	0%	10	0%
	TOTAL C&C	10	0%	0	0%	10	0%
Admin	Labor & G&A	0	0%	0	0%	0	0%
	Direct	0	0%	0	0%	0	0%
Allocation of Shared Services		1,091	18%	963	21%	128	13%
	TOTAL ADMIN	1,091	18%	963	21%	128	13%
TOTAL		5,916	100%	4,681	100%	1,235	26%

Variance Drivers:

- **Emerging Technology –** Additional headcount will support work to move opportunities toward program advancement milestones.
- **Market Strategy and Execution –** Budget increase will support maturing gas portfolio and including of at least one new dual-fuel or fuel-neutral program in the portfolio in 2025.
- **Codes and Standards** – Budget decrease due to slower standards activities in 2025 and fewer research projects compared with 2024.
- **Analytics Research and Evaluation –** Increase in activities supporting milestone advancements for new and existing programs, up from minimal activities in 2024.
- **Allocation of Shared Services** – Growth due to total NEEA expense increases as well as proportional share attributed to gas.

Table 5 –2024 Forecast vs. 2025 Market Strategy and Execution Budget
Direct Expenses by Product Group ($ Thousands)

Product Group	Program/ Initiative	Electric ($)			Natural Gas ($)		
		2024 Forecast	2025 Budget	Net Change ($)	2024 Forecast	2025 Budget	Net Change ($)
Building Envelope	Building Envelope Strategy	10	0	-10	0	0	0
	High-Performance Windows	60	0	-60	43	0	-43
	Total Building Envelope	70	0	-70	43	0	-43
Consumer Products	Retail Product Portfolio	2,760	2,775	15	0	0	0
	Total Consumer Products	2,760	2,775	15	0	0	0
HVAC	HVAC Strategy	218	0	-218	106	0	-106
	Efficient Rooftop Units	0	0	0	500	525	25
	High-Performance HVAC	1,035	1,050	15	0	0	0
	Advanced Heat Pumps	736	1,250	514	0	0	0
	Total HVAC	1,989	2,300	311	606	525	-81
Lighting	Lighting Strategy	276	0	-276	0	0	0
	Luminaire Level Lighting	1,245	1,200	-45	0	0	0
	Total Lighting	1,521	1,200	-321	0	0	0
Motor-Driven Products	XMP – Pumps	1,230	1,400	170	0	0	0
	Efficient Fans	136	250	114	0	0	0
	Total Motor-Driven Products	1,365	1,650	285	0	0	0
Water Heating	Advanced Commercial Water Heating	0	0	0	230	490	260
	Efficient Gas Water Heaters	0	0	0	178	0	-178
	Heat Pump Water Heaters	2,430	2,493	63	0	0	0
	Water Heating Strategy	61	35	-26	0	0	0
	Total Water Heating	2,491	2,528	37	408	490	82
Infrastructure	BetterBricks	545	450	-95	0	0	0
	Integrated Design Labs	400	425	25	0	0	0
	Total Infrastructure	945	875	-70	0	0	0
	TOTAL	11,142	11,328	186	1,058	1,015	-43

Variance Drivers:

- **Building Envelope –** High Performance Windows removed from portfolio.
- **Consumer Products –** No material change.
- **HVAC –** HVAC data collection budget moved to analytics, research and evaluation workstream. Advanced Heat Pumps ramping up market activities.
- **Lighting –** Lighting data collection budget moved to analytics research and evaluation workstream.
- **Motor Driven Products –** Efficient Fans and XMP-Pumps ramping up market activities in 2025.
- **Water Heating –** Efficient gas water heaters has been deprioritized to focus on commercial opportunities. Advanced Commercial Gas Water Heating increasing program development activities.
- **Infrastructure –** The BetterBricks budget in 2024 included enhanced market research activities.

Table 6 – 2025 Non-core Funding Budget By Project ($ Thousands)

Table 6 reflects contracted or anticipated projects at the time of the 2025 Operations Plan. Expenses and associated revenue from special projects are reviewed quarterly by the Board's Finance and Audit Committee. Please note: Non-core funding includes special projects identified in the Cycle 7 Business Plan and other strategic engagements that have their own funding source. Expenses are 100% covered by special funding agreements.

Non-core Funding	Expense Type	Electric ($)	Natural Gas ($)	Total ($)
End Use Load Research	Labor & G&A	476	0	476
	Direct	1,087	0	1,087
End Use Load Flexibility Project	Labor & G&A	1,224	0	1,224
	Direct	1,125	0	1,125
Commercial Whole Building Project	Labor & G&A	835	0	835
	Direct	380	0	380
Other Strategic Engagements	Labor & G&A	301	0	301
	Direct	100	0	100
Total		5,528	0	5,528
All Non-core Funding	Labor & G&A	2,836	0	2,836
	Direct	2,692	0	2,692

Comments:

- **End Use Load Research** – This regional research project was launched in 2017 and will wrap-up in Cycle 7.
- **End Use Load Flexibility Project** – This is a two-year special project that launched in 2024 and will wrap up in 2025.
- **Commercial Whole Buildings Project** – This is a two-year special project anticipated to begin in 2025.
- **Other Strategic Engagements** – These projects are funded by organizations based outside of the region and involve activities and engagement that tie to NEEA's goals and deliver value back to the Northwest.

Appendix A: Program Activities

Appendix A is organized by **Product Group:** Consumer Products, HVAC, Lighting, Motor-Driven Products, and Water Heating. Each Product Group includes a summary of the Product Group's focus areas and strategic engagements with industry partners and organizations that are critical to achieving our Market Transformation goals. These are followed by detailed program plans, which are tailored according to the Initiative Lifecycle (ILC) phase of that program (see graphic below). Each phase of the ILC has a distinct purpose and associated objectives. As programs move through the ILC, goals, objectives and strategies evolve. In prep for Cycle 7, NEEA staff and RPAC are working to identify potential changes for the ILC, including the addition of a vote before transition to Long-Term Monitoring and Tracking and naming convention updates, pending RPAC charter approval in Q1 2025.

Concept Development: The purpose of this phase is to develop a logical Market Transformation concept for the product or practice as well as a reasonable estimate for savings. Given the preliminary nature of this work, staff do not typically prepare in-depth annual operations plans for opportunities in Concept Development.

Program Development: The purpose of this phase is to validate confidence in the product or practice attributes, market opportunity, savings potential and mechanism for diffusion. Using these inputs, NEEA staff develop a viable, scalable Market Transformation program and identify opportunities to accelerate the path to Market Development. In this phase, staff do not yet have enough information to develop total regional or co-created savings estimates, so rely on 20-year potential savings to estimate program opportunity.

Market Transformation

- **Market Development:** The purpose of this phase is to create lasting market change through direct market interventions designed to remove barriers, leverage market opportunities and tap influencers and existing channels for diffusion. Interventions are strategic, planned and adaptively managed as market dynamics change and more information is gained. During annual planning, NEEA

staff look for the most impactful market levers and activities that could bolster or accelerate the achievement of alliance Market Transformation goals. It is in this phase of the ILC that energy savings begin to be estimated and reported to the region.

- **Long-Term Monitoring and Tracking:** The purpose of this phase is to monitor and track market diffusion after NEEA has withdrawn active intervention in the market and to estimate and report energy savings associated with alliance market activities. The budget for this work falls within the Analytics, Research and Evaluation workstream.

Product Group: Consumer Products

The Consumer Products Product Group comprises the entire supply chain, including manufacturers, distributors, physical and online retailers, contractors, and installers that deliver consumer goods and services in high volume as well as end customers who purchase them. There is one program in the Consumer Products Group, Retail Product Portfolio (RPP).

As outlined in the RPP section below, focus for developing energy efficiency opportunities will continue to be centered around televisions, laundry and refrigerators, where significant emerging technology, such as advanced insulation (refrigerators), all-in-one laundry equipment and improved operating systems (televisions), will present new opportunities. In addition, focusing beyond individual product efficiency improvements, streamlining the consumer energy-efficient product shopping experience (currently being tested through the Northwest Regional Marketplace scanning project) and better understanding of connected product and smart home systems potential are crucial.

Section 1 – Strategic Engagements

Organization	Value to the Northwest	Relevant Program or Opportunity
Environmental Protection Agency (EPA)	Through collaboration with EPA, NEEA is able to inform and influence program decision-making, specifically on the ENERGY STAR program, consumer products specifications, and most efficient criteria.	RPP
ENERGY STAR Retail Products Platform (ESRPP)	NEEA administers the national ESRPP program, which increases leverage with retailers and manufacturers via the ENERGY STAR brand and greater scale.	RPP
U.S. Department of Energy (DOE)	Working with DOE, NEEA provides Northwest region-specific data to inform and influence federal standards.	RPP
Consumer Technology Association (CTA)	NEEA participates in technical committees to inform and influence development of specifications and test procedures.	RPP
Enervee	Through a technology scanning project, NEEA is evaluating the use of a Northwest Regional Marketplace as a platform to streamline the consumer shopping experience and increase volume of energy-efficient products sold.	Consumer Products

Organization	Value to the Northwest	Relevant Program or Opportunity
Major Retailers	Through long-standing relationships with major retailers, such as Home Depot, Lowe's, Best Buy and Nationwide, NEEA identifies individual market influence opportunities to support RPP goals.	RPP
Market Transformation Administrators (i.e., NYSERDA, ComEd and CalMTA)	By working with MT program administrators outside the Northwest region, NEEA: • Increases program scale, collaboration on specifications, test procedures and standards as well as market and program influence. • Supports collaboration and training on market transformation methodologies to build market capacity and improve outcomes for all parties. • Identifies individual market influence opportunities as they arise via ESRPP.	RPP

Program Name: Retail Product Portfolio

ILC Phase: Market Development

Executive Summary – The Retail Product Portfolio (RPP) program partners with utility organizations, national retailers, and EPA's ENERGY STAR Retail Products Platform (ESRPP) to influence corporate retail buyer's purchase decisions and give the alliance access to full-category sales data. By providing midstream incentives, the alliance encourages retailers to purchase, stock and promote higher-efficiency products. Retailers provide data that allows NEEA to identify the most promising energy efficiency opportunities and gain insights to influence the stringency of ENERGY STAR specifications and the advancement of federal standards. NEEA's RPP program works to drive sales of efficient consumer appliances and electronics sold through national retailers. The products in the portfolio have the potential to deliver 500 aMW of energy savings for the Northwest over the next 20 years.

In 2025, the RPP program will focus on actively participating in upcoming ENERGY STAR specification revisions for laundry and refrigerators and prepare to influence future DOE test procedures to ensure sustained savings. Additionally, with the new television test procedure introduced in late 2023, the program will focus on increasing the market share of ENERGY STAR televisions. This will be achieved by establishing partnerships and a program to increase market share of ENERGY STAR televisions and ensure continued relevance of test procedures and voluntary agreement specifications. Lastly, the national ESRPP sponsorship expanded with CalMTA joining the program as a pilot. ESRPP is now supported by 18 sponsors covering 31% of U.S. households. In 2025, resources will be dedicated to supporting the CalMTA pilot and assisting sponsors in program evaluation to ensure continued success of the national program.

Section 1 – Program Overview

Market Transformation Theory	Highly efficient products have not been widely promoted by retailers and adopted by consumers because the efficiency of appliances and electronics is not a top consideration of corporate retailer buyers, and the benefits of energy savings are often too small to impact many consumers' choices. NEEA's RPP program is working with extra-regional program administrators, national retailers and EPA's ESRPP to influence corporate retail buyers' purchase decisions through mid-stream incentives and gain access to full category sales data. The incentives encourage retailers to purchase, stock and promote higher-efficiency products. RPP analyzes the full category sales data to identify the most promising energy efficiency opportunities and leverages the insights gained from the data analysis to influence increased stringency of ENERGY STAR specifications and federal standards. These actions cause a permanent change to the manufacturing processes across entire product categories, resulting in energy savings for years to come.
Current Market Barriers and Opportunities	**Barriers:** • Energy efficiency is not a top consideration for corporate retail buyers. • The benefits of energy savings are often too small to impact many consumers' choices. **Opportunities:** • Influence manufacturers to develop and build more efficient products by supporting advancements to specifications, standards and test procedures. • Continue to play a significant role as the facilitator of the ESRPP Program Governance Committee and task forces made up of representatives from each Program Sponsor organization. • Identify Inflation Reduction Act incentives for heat pump dryers that can support the region's efforts to speed market adoption of this technology. • Work closer with manufacturers and retailers to advance energy efficiency in consumer products by leveraging corporate Environmental Societal and Governance goals and trends, specifically emissions goals. • Leverage increased interest in market transformation programs among utilities and energy efficiency organizations nationally to attract additional program sponsors.
Accomplishments	• Provided comments to the Association of Home Appliance Manufacturers that resulted in recommendations on new standards levels for refrigerators, clothes washers and dryers, cooking products, dishwashers and miscellaneous refrigeration in 2023. DOE issued finals rules on these categories in late 2023 and 2024. • Continued testing TVs using the new test procedures. • Began planning a TV marketing campaign with Best Buy to spread consumer awareness. • Added Dominion, Virginia, North Carolina and CalMTA to the ESRPP program in 2024, bringing the program's share of U.S. households to 31%.

Section 2 – Goals and Activities

2025 Goals	Critical Activities	Target	Threshold
Advance television savings opportunity by growing ENERGY STAR v 9.1 market share, continuing to monitor the voluntary agreement and ensuring the TV test procedure is augmented as needed. *Barriers addressed:* • *Energy efficiency is not a top consideration of corporate retail buyers* • *The benefits of energy savings are often too small to impact many consumers' choices*	• Continue technical support of NEEA test methodology to maintain relevance. • Continue technical support (via Pacific Crest Labs) on the voluntary agreement that many TV manufacturers signed indicating they would meet minimum efficiency standards. • Develop and implement a midstream incentive program for TVs through ESRPP or regionally. • Advocate for ENERGY STAR TV visibility and adoption among retailers, manufacturers and other stakeholders. • Pursue adding a TV retailer to ESRPP. • Complete advertising campaign for ENERGY STAR televisions with major retailer and analyze results to determine effectiveness.	Implement a national incentive program with other ESRPP program sponsors.	Implement a regional program to support ENERGY STAR TVs.
Advance refrigerator savings opportunity by supporting energy-efficient technologies, leveraging data for future comments on test procedures and ENERGY STAR specifications. *Opportunity:* • *Advances in specifications and standards influence manufacturers to develop and build more efficient products*	• Support ENERGY STAR specification development process through final version. • Develop a plan to influence test procedure updates that reflect energy savings benefits of advanced inverter compressors. • Encourage broader application of advanced insulation or other technologies applied to energy savings benefits.	Ensure final draft of ENERGY STAR specifications includes key NEEA recommendation.	Provide data and comments for ENERGY STAR refrigerator specifications.

2025 Goals	Critical Activities	Target	Threshold
Advance laundry savings opportunity by leveraging data for future comments on test procedures and ENERGY STAR specifications. *Opportunity:* • *Advances in specifications and standards influence manufacturers to develop and build more efficient products*	• Support ENERGY STAR dryer and washer specification development processes through final version. • Leverage favorable market adoption of heat pump dryers in all-in-one laundry equipment and laundry centers to encourage further innovation in the heat pump dryer category and drive additional share gains. • Research and begin to develop test procedure recommendations for clothes dryers and all in one combo units.	Ensure draft of ENERGY STAR specifications includes key NEEA recommendation.	Provide data and comments for clothes washer ENERGY STAR specifications.
Grow and strengthen ESRPP program through sponsor evaluation support, targeted recruitment and retention activities. *Barrier addressed:* • *Energy efficiency is not a top consideration of corporate retail buyers*	• Develop support plan for program sponsor evaluations and track sponsor evaluation results. • Work with CalMTA to support assessment of its pilot program. • Recruit additional program sponsors. • Meet with each program sponsor to review their satisfaction with the program.	Begin implementing activities identifed in the evaluation support plan by Q3.	Draft plan for ESRPP evaluation support by Q2.

Product Group: HVAC

The HVAC Product Group is comprised of the supply chain that manufactures, distributes, specifies, designs and installs commercial and residential HVAC products, as well as the end consumers who purchase them. There are three programs currently in the HVAC Product Group: Advanced Heat Pumps, Efficient Rooftop Units (RTU), and High-Performance HVAC.

To achieve the Product Group vision of reducing newly installed HVAC systems' energy use by 30% and ensuring HVAC loads in residential and commercial buildings do not continue to increase, the Product Group identified two strategic priorities for 2025 and beyond: 1) Build a portfolio of the most impactful Market Transformation opportunities for residential and commercial across gas and electric technologies/practices; and 2) Grow valued partnerships by collaborating internally and externally with market and efficiency community partners.

1) **Pursue Highest Impact Portfolio** by building a portfolio of the most impactful Market Transformation opportunities for residential and commercial across gas and electric technologies/practices. Key 2025 activities include:

    - Pursue residential gas HVAC load reduction and flexibility by proposing a Residential Dual-Fuel HVAC Program for Concept Advancement in 2025.
    - Add a gas heating option to the high-performance HVAC Very High Efficiency Dedicated Outdoor Air System (DOAS) specification and program. This will create a fuel neutral program that can more swiftly transform the commercial market through broader market engagement and demand creation.
    - Pursue a fuel neutral approach for the gas Efficient RTU program, laying the groundwork for the program to include hybrid (heat pump with gas backup) and heat pump efficient RTUs, aiming to join the electric portfolio in 2026.
    - Build a forecasting model that enables scenario comparisons across various HVAC opportunities and fuel types to inform future portfolio priorities.

2) **Grow Valued Partnerships** by collaborating internally and externally with market and efficiency community partners. Focus areas for 2025 include:

    - Continue developing relationships and strategies to collect sufficient HVAC sales data to build a representative model of the commercial market across the four-state region.
    - Partner with the Codes & Standards team to increase NEEA HVAC initiative presence and influence in the development of national code, designer guidance, test procedure, and metric development via organizations including ASHRAE, International Energy Conservation Code (IECC), Air Conditioning Heating and Refrigeration Institute (AHRI) and the United States Department of Energy (DOE).
    - Amplify NEEA's influence and benefit from others' investments by being a regional conduit to national activity, via venues such as the Advanced Heat Pump Coalition, the American RTU Collaborative in partnership with the Consortium for Energy Efficiency, and the North American Gas Heat Pump Collaborative.
    - Coordinate NEEA's market presence across programs to maximize impact. Especially as HP HVAC and ERTU begin to work across fuel types in the commercial market, NEEA will coordinate market

development activities and partnerships to ensure market clarity, expand cross-program market intelligence, and streamline market partner engagement.

Section 1 –Strategic Engagements

Organization	Value to the Northwest	Relevant Program or Opportunity
Advanced Heat Pump Coalition	Through the coalition, NEEA works to advance metrics, best practices and desired product features, and promote alignment and support for Advanced Heat Pump improvements among the North American utility and efficiency community.	Advanced Heat Pumps
Air Conditioning Heating and Refrigeration Institute (AHRI)	NEEA collaborates with AHRI to develop test procedures and ratings that are proposed to DOE.	Advanced Heat Pumps
American Council for an Energy Efficient Economy (ACEEE)	NEEA's participation in planning the ACEEE Hot Air Forum provides opportunity to build multi-region support, alignment, and investment across HVAC programs.	Advanced Heat Pumps, Efficient RTU, High-Performance HVAC
ASHRAE	ASHRAE performs research/analysis and is actively building a coalition to inform proposal for ASHRAE 90.1-2025 and/or 2027 IECC development process.	High-Performance HVAC
	Working with the TC811 Next Generation Equipment Rating Committee builds alignment and support for the Advanced Heat Pump approach and load-based rating.	Advanced Heat Pumps
	Working with the TC5.5 Air to Air Energy Recovery (ERV/HRV) Committee influences specifications and guidance for energy recovery in RTUs.	Efficient RTU
California Energy Commission (CEC)	Collaboration with CEC builds alignment and support for Advanced Heat Pump approach and load-based heat pump rating for the Title 24 Standard.	Advanced Heat Pumps
California Market Transformation Administrator (CalMTA)	Working with CalMTA supports alignment between CalMTA's and NEEA's Efficient RTU initiatives to increase speed and impact of program interventions.	Efficient RTU
Center for Energy and Environment Efficient Technology Accelerator Program	Through this collaboration, NEEA supports coordination of market transformation investments in efficient RTU and residential heat pumps and builds multiregional support for product specifications.	Efficient RTU, Advanced Heat Pumps, HVAC scanning
Consortium for Energy Efficiency (CEE)	Collaboration with CEE encourages alignment of specifications, consideration of Northwest priorities in specifications (including for the federal tax credit) and informs and utilizes research.	Efficient RTU, Advanced Heat Pumps
CSA Group	Working with the P.8 Thermal Efficiency of Gas RTU Committee builds support and awareness for version 3 of the rating.	Efficient RTU

Organization	Value to the Northwest	Relevant Program or Opportunity
	Working with the SPE18 Heat and Energy Recovery Ventilator Test Procedure Committee contributes to new whole box test procedure.	High-Performance HVAC
	Collaboration on the C700 ANSI Standard for Load-Based Test Procedure for Heat Pumps builds alignment and support for Advanced Heat Pump approach and load-based rating.	Advanced Heat Pumps
	Working with the EXP19 Dual-Fuel System Test Procedure Committee establishes a non-accredited performance rating methodology for dual-fuel systems.	HVAC scanning
Energy Solutions Center	Through Energy Solutions Center, NEEA collaborates with natural gas service providers and equipment manufacturers to inform and influence gas HVAC scanning and programs.	HVAC scanning
Environmental Protection Agency (EPA)	Collaboration with EPA builds alignment and support for Advanced Heat Pump approach.	Advanced Heat Pumps
GTI Energy's Emerging Technology Program	This partnership supports collaboration with partners across North America to accelerate the commercialization and adoption of energy-efficient technologies.	Efficient RTU, HVAC scanning
Institute for Market Transformation (IMT)	Collaboration with IMT connects key stakeholders outside the region to coordinate pilots, investment and build multi-region support for the very high efficiency DOAS approach.	High-Performance HVAC
International Standards Organization (ISO)	Work on the TC086 Load Based Test Procedure builds alignment and support for Advanced Heat Pump approach and load-based rating.	Advanced Heat Pumps
New York City Housing Authority (NYCHA) and New York State Energy Research and Development Authority (NYSERDA)	NEEA is collaborating with NYCHA and NYSERDA to share information and coordinate on window heat pumps (also known as micro heat pumps).	RPP, Advanced Heat Pumps
NYSERDA	Collaboration with NYSERDA builds multi-region support and coordinated investment for very high efficiency DOAS approach and Advanced Heat Pump improvements.	High-Performance HVAC, Advanced Heat Pumps
Nicor Gas	Together, Nicor Gas and NEEA coordinate shared investment in Efficient RTU program efforts and build multi-regional support for voluntary specification.	Efficient RTU
Northeast Energy Efficiency Partnership (NEEP)	Collaboration with NEEP's Residential Heating Electrification Initiative enhances understanding of cold climate heat pump performance, general coordination of investments and multi-regional support for advanced heat pump improvements,	Advanced Heat Pumps

Organization	Value to the Northwest	Relevant Program or Opportunity
	specifically Low Load Efficiency and Connected Commissioning metrics in 2025.	
OpenADR Alliance	NEEA participates in committees relevant to use of demand response in heat pumps.	Advanced Heat Pumps and HVAC scanning
U.S. Department of Energy (DOE)	NEEA actively works with DOE to support: • Heat Pump Field Validation Partnership, which informs the development of national tools and information resources and utilizes resulting assets • Heat pump minimum efficiency standards and test procedure rulemaking • Heat pump test procedure rulemaking • Commercial Building Heat Pump Accelerator	Advanced Heat Pumps
	NEEA is also informing the RTU Campaign and aligning campaign specifications and goals with the Efficient RTU program.	Efficient RTU

Program Name: Advanced Heat Pumps

ILC Phase: Market Development

Executive Summary – The Advanced Heat Pump Program aims to drive adoption of product features, capabilities and ratings that will deliver higher efficiency in all residential variable speed heat pumps installed in the Northwest. The Advanced Heat Pump program advanced to the Market Development phase in Q3 2023. NEEA identified 10 core potential heat pump improvements which, if adopted, will increase savings, increase load flexibility capabilities and reduce dependence on contractor capabilities. Currently, the alliance is primarily focused on technologies with low load efficiency, cold climate capability, minimizing supplemental heat, connected commissioning, and automatic load flexibility. Additionally, the alliance is focusing its standards work on improving the accuracy of the test procedure metrics and including impacts of defrost, standby losses, crank case heater use and criteria for cold climate capabilities, load flexibility and dual-fuel ratings.

In 2025, NEEA will continue to lead the Advanced Heat Pump Coalition and serve on over a dozen standards and technical advisory boards responsible for heat pump metrics and specifications to influence adoption of advanced heat pump improvements. Work in 2025 will continue focusing on adoption of the new test procedure for air source heat pumps (Canadian standard C700, U.S. Department of Energy 10 CFR part 430, Subpart A), influencing tax credit specifications, ENERGY STAR requirements, and U.S. DOE minimum federal efficiency requirements. Additionally, program activities will look to identify opportunities to gain manufacturer support of targeted heat pump improvements through product development, manufacturing, training, standards and specifications. NEEA staff also will continue to combine use of market data, field data, lab data, and analysis to refine savings estimates and demonstrate improved product differentiation and value proposition for the customer, manufacturer and utility.

Section 1 – Program Overview

Market Transformation Theory	NEEA has identified a set of low- and no-cost improvements that meaningfully increase installed heat pump system efficiency. To address the market's lack of awareness of what delivers efficiency and ability to competitively differentiate these improvements, NEEA aims to: 1. Validate energy savings and establish metrics to identify qualifying products for each improvement. 2. Build support among manufacturers and efficiency program partners for incorporating recommended improvements into specs and standards. 3. Leverage existing manufacturer, distributor and efficiency/decarbonization program training and marketing to drive contractor and consumer awareness and education, when identified as an opportunity, resulting in increased availability and adoption of higher efficiency systems. As demand for improved products expands due to awareness, specifications and standards, NEEA staff anticipate manufacturers will see competitive advantage in including improvements, resulting in expanded availability and marketing of the improvements. As adoption of improved products grows, installed systems will deliver greater efficiency regardless of design and installation errors, reducing the likelihood that significant contractor engagement will be needed. The program's ultimate goal is to continuously improve average installed efficiency and peak savings across all residential-size heat pump systems in the Northwest so that by 2030, average installed efficiency of residential-size heat pumps is 30% more efficient than 2017 average.
Current Market Barriers and Opportunities	**Barriers:** • Lack of product differentiation for improvements. • Lack of awareness of energy improvements. **Opportunities:** • Maximize on the many other programs and organizations investing in heat pumps for efficiency, decarbonization and grid capacity. • Support increasing end-user demand, incentives, and requirements for indoor air quality (IAQ), decarbonization and cooling. • Enable product differentiation through qualified product lists and specifications to support manufacturers seeking product differentiation opportunities.
Accomplishments	• Co-developed a load-based procedure (SPE07) for heat pumps and provided ongoing support for it to become an ANSI-accredited national standard (C700). • Participated in the AHRI test procedure revisions in 2023, which resulted in elements of SPE07 being included in the U.S. DOE test procedure standard (10 CFR part 430, Subpart A). This inclusion supports improved evaluation of low load efficiency, standby power, and defrost energy consumption impacts.

	• Responded to DOE's request for information for proposed changes to the federal minimum efficiency standard for central air conditioners and heat pumps and participated in negotiations with AHRI. (A formal DOE proposed rulemaking is expected in the next year.) • Completed market and technical research on drivers of low load efficiency. • Conducted load-based lab testing research on low load efficient systems. • Completed an analysis of Bonneville Power Administration's High-Performance High-Capacity Heat Pump field study data for low load efficiency. • Influenced adoption of cold climate criteria into ENERGY STAR, AHRI test procedure, and federal tax credit levels. • Convened regional charette in support of Regional Technical Forum heat pump measure revisions, to identify regional priorities for addressing challenges to heat pump savings. • Supported BPA on field validation project of incremental cold climate heat pump savings. • Established both an industry technical working group and a utility and program-led advanced heat pump coalition workgroup to develop a Connected Commissioning specification. • Collaborated with DOE, EPA, Pacific Northwest National Laboratory and National Renewable Energy Labs to define a multi-year project that will define the Connected Commissioning specification, a method of test and certification, and to build a qualified product list.

Section 2 – Goals & Activities

2025 Goals	Critical Activities	Target	Threshold
Increase support from regional and national partners for inclusion of NEEA's priority heat pump improvements in specifications, qualified products lists, product development, and standards reporting. *Barriers addressed:* • *Lack of awareness of energy efficiency improvements and their value propositions*	• Continue leading the Advanced Heat Pump Coalition to influence regional and national stakeholders to adopt NEEA's priority heat pump improvements • Give presentations that promote inclusion of improvements (examples include Consortium for Energy Efficiency meetings, ENERGY STAR Partners meeting, Hot Air Forum, HVAC Excellence Conference, Efficiency Exchange, etc.) • Participate in working groups and committees to influence education and adoption of improvements. • Participate in EPA process to update heat pump ENERGY STAR and ENERGY	Facilitate adoption of at least one improvement by two or more target partners, such as in CEE, EPA and RTF, in specifications, manufacturers in product positioning, and in utility or efficiency programs.	Facilitate adoption of at least one improvement by one or more target partners.

2025 Goals	Critical Activities	Target	Threshold
• *Lack of product differentiation for improvements*	STAR Most Efficient criteria to impact adoption of improvements. Expected to kick off in 2025.		
Refine savings rate confidence and metrics that can be used for NEEA savings tracking and to convey value proposition to the market. *Barrier addressed:* • *Lack of product differentiation for improvements that impact efficiency and grid capacity*	• Gather and analyze existing heat pump field data (several known sources) to calibrate or improve energy models. • Use data analysis to design field studies that will address gaps in knowledge to define savings rate values. • Work with manufacturers and efficiency stakeholders to inform product differentiation and metrics (e.g. minimize supplemental heat, connected commissioning, no duct losses) • Support and collaborate with Regional Technical Forum to develop a regional cold climate heat pump measure. • Manage both a manufacturer working group and stakeholder workgroup to develop the specification and market strategy for connected commissioning. • Support development of connected commissioning test method and qualified products list • Develop specification for minimizing supplemental heat.	Complete field data analysis with final report and future field study defined.	Complete field data analysis.
Establish clear, consistent priority heat pump improvement messaging and value propositions for program partners and target audiences. *Barrier addressed:* • *Lack of awareness of energy efficiency improvements and their value propositions*	• Develop program collateral showcasing clear value proposition of improvements for key audiences (manufacturers, specification bodies, utilities). • Leverage NEEA's BetterBuiltNW platform and website redesign to communicate benefits of improvements to regional distributors and installer training organizations. • Identify and target other industry and trade organizations as communications outlets.	Publish program communications resources for at least five improvements on BetterBuiltNW.com.	Develop program communications resources for at least three improvements.

Program Name: Efficient Rooftop Units (RTU)

ILC Phase: Market Development

Executive Summary – The Efficient RTU program aims to increase the efficiency of rooftop units through product differentiation and ultimately federal standards. Gas-fired packaged rooftop units, or RTUs, are HVAC systems that contain all the components needed to provide conditioned air and ventilation in a single box. Commonly found in commercial applications, they are particularly prevalent in low rise commercial buildings and condition approximately 35% of gas-heated commercial floor area in the Northwest.

Since beginning Market Development in 2023, the program has focused on engaging with HVAC manufacturers to increase availability of eligible efficient RTUs, primarily in the lower cost, light commercial products. The program also engaged with the supply chain to build awareness and understand the interventions and value propositions that would result in greater sales of efficient RTUs. The program worked extra-regionally to socialize and build alignment around NEEA's efficient RTU specification.

In 2025, the program expects to continue in Market Development and focus on achieving these key goals:

1. Encourage manufacturers to develop and promote efficient RTUs for the light commercial market.
2. Create awareness of, and support to increase sales (via promotion, training, and/or incentives) of efficient RTUs with market actors (manufacturers, manufacturer representatives, distributors, and contractors) and utilities across the U.S. and Canada.
3. Ensure a clear, cohesive set of value propositions for efficient RTUs throughout the supply chain.

The program expects to receive the first Market Progress Evaluation Report (MPER) in 2025 and will adaptively manage the program to incorporate any key findings from that research.

Section 1 – Program Overview

Market Transformation Theory	The current federal standard for RTU components, including Commercial Warm Air Furnace (CWAF), does not require condensing furnaces, heat recovery, or address shell losses. Each of these features deliver 10–40% natural gas savings beyond today's minimum efficiency RTUs. Today these features are typically only available in customized, premium RTUs, which make up a very small portion of this highly commoditized, cost-competitive market, but widespread market adoption of these efficient features could generate annual savings between 3 million and 10 million therms by 2039. NEEA aims to transform the Northwest market to efficient RTUs by: • Addressing equipment availability and first-cost market barriers by working with manufacturers to produce an increasing variety and volume of light commercial efficient RTUs, including lower price-point models. • Increasing awareness of efficient RTUs and their value proposition among distributors, manufacturer representatives, contractors, and facility managers. • Differentiating more efficient units by using NEEA's voluntary specification and increasing eligible equipment on the qualified product list (QPL). • Leveraging state and federal codes, as well as voluntary and federal standards, to increasingly require efficient RTU efficiency measures.

	Ultimately, the efficient RTU program will provide the evidence needed to support a federal standard by 2030 that requires at least 20% more efficient RTUs than the 2020 market average.
Current Market Barriers and Opportunities	**Barriers:** • **Differentiation** – The market is unable to differentiate RTUs that have superior whole-box efficiency. • **Availability** – Limited availability of Tier 1 products (based on NEEA's Qualified Product List) for the light commercial replacement market. • **First Cost** – Insufficient value proposition to overcome higher first cost (equipment and install) and risk aversion for manufacturers, contractors and customers. • **Market Awareness** – Lack of awareness of products/features that deliver heating efficiency. • **Contractor Capacity** – Lack of contractor knowledge and experience specifying and installing heat/energy recovery. **Opportunities**: • **Codes** – Opportunity to require specification and/or CSA P.8 test procedure in future codes and standards. • **North American Alignment** – Customer and utility interest in improved energy and carbon efficiency in the U.S. and Canada.
Accomplishments	• Worked with the CEE, Minnesota's Center for Energy and Environment (MNCEE), and Efficiency Vermont to convene a national RTU working group to coordinate RTU efficiency efforts across North America. • Worked with a light commercial HVAC manufacturer to bring a low-cost Energy Recovery Ventilator (ERV) add-on to its RTU lines. • Lab tested three representative units to verify updated P.8 test procedure. • Completed two field tests utilizing lab-tested units to validate lab results in a real world environment. • Developed and refined specification and compliant product list based on manufacturer feedback and energy modeling results. This specification will be used to qualify equipment for the program and for utilities to inform other program designs. • Consulted with CalMTA, MNCEE and Nicor Gas on development of Efficient RTU programs modeled after NEEA's in California and the midwest, extending the market share represented and capacity to transform the market.

Section 2 – Goals & Activities

2025 Goals	Critical Activities	Target	Threshold
Encourage manufacturers to develop and promote efficient RTUs for the light commercial market. *Barriers addressed:* • Availability • Awareness • First cost	• Engage with major manufacturers to expand availability of qualified products that serve the light commercial (under 12 ton) replacement/maintaince market. • Refine manufacturer engagement plan to effectively target development of new products/price points. • Develop value proposition and work with manufacturers to increase qualified units for the light commercial market. • Demonstrate demand by securing bulk purchases and increasing the prevalence of efficient RTU programs across the country.	Work with a minimum of four manufacturers to develop new eligible equipment, two new price points, or two expanded product lines that serve the light commercial market.	Work with a minimum of two manufacturers to develop new eligible equipment, or one new price point, or one expanded product line that serves the light commercial market.
Create partnerships and support for efficient RTUs among market actors (manufacturers, manufacturer representatives, distributors, contractors) and utilities across the US and Canada. *Barriers addressed:* • Awareness • First cost	• Refine value proposition that resonates with contractors and building owners by working with distributors and manufacturer representatives. • Collaborate with key stakeholders (utilities and partner organizations such as Nicor Gas, MN CEE, CalMTA and the CEE) in and outside the region to coordinate specification/QPL and investment in program efforts. • Partner with distributors to increase regional availability of ERTUs. • Provide early-stage incentives to help buy down risk and encourage distributor and manufacturer promotion of ERTUs. • Work with distributors and manufacturer representitives to gather incremental pricing and category sales data.	Recruit six manufacturers/ distributors/ manufacturer representatives to partner and submit data showing efficient RTU sales by Q2 2025.	Recruit four manufacturers/ distributors/ manufacturer representatives to partner and submit data showing efficient RTU sales by Q4 2025.
Ensure a clear, cohesive set of value propositions for efficient RTUs throughout the supply chain.	• Develop overarching marketing plan to provide needed collateral for the supply chain to demonstrate value of efficient RTUs. • Partner with manufacturer representatives and distributors to	Develop eight new marketing assets (trainings, flyers, case studies, etc.) by Q3 2025.	Develop six new marketing assets (trainings, flyers, case

2025 Goals	Critical Activities	Target	Threshold
Barriers addressed: • Awareness • Contractor Capability • Differentiation	create marketing, education and training opportunities. • Leverage BetterBricks platform to increase knowledge of efficient RTUs and value propositions. • Collaborate with natural gas utilities to explore joint marketing opportunities. • Work with manufacturers to identify efficient RTU installations to create case studies.		studies, etc.) by Q4 2025.

Program Name: High-Performance HVAC

ILC Phase: Market Development

Executive Summary – The High-Performance HVAC program aims to transform the commercial HVAC market in the Northwest toward adoption of Very High Efficiency Dedicated Outside Air Systems (DOAS), which separate the heating and cooling from the ventilation, allowing for optimal functionality of these system components. When compared to a code-minimum system replacement, the very high efficiency DOAS approach has demonstrated a reduction in commercial building energy use by an average of 48% and HVAC energy use by an average of 69% compared to conventional HVAC systems. In 2025, the program will continue to focus on the following key goals:

- Continue engagement and education efforts to promote system approach and highlight value proposition throughout the supply chain
- Increase availability of lower cost qualifying E/HRVs
- Build support for NEEA's proposed code changes

In addition to these focus areas, during 2025 the program will look to expand the program scope to include Gas High-Efficiency Dedicated Outside Air Systems, applying the system approach to efficient natural gas technology. The program also expects to receive the first Market Progress Evaluation Report (MPER) in 2025 and will adaptively manage the program to incorporate any key findings from that research.

Section 1 – Program Overview

Market Transformation Theory	Despite rising popularity of variable refrigerant flow (VRF) systems, adoption of very high efficiency HRVs/ERVs has been limited due to relatively high prices and lack of awareness of the products, design principles, and value proposition. Also, system designers and contractors are reluctant to implement many of the design practices because they are not as familiar and straightforward as today's common practice of employing packaged roof top units. Further, while very high efficiency E/HRV availability has improved, cost remains a barrier. NEEA will work to achieve sustained market change by 1) continuing to engage and educate the supply chain on the benefits of the system approach and highlight the value proposition (including non-energy benefits) throughout the supply chain; 2)

	increasing availability of lower cost qualifying E/HRVs; and 3) building support for NEEA's proposed code changes. As a result of this program, by 2035, the commercial energy code in each Northwest state will require the very high efficiency DOAS approach or equivalent efficiency. This exceeds the 2014 minimum commercial energy code in each of those states by at least 45% of average HVAC energy savings.
Current Market Barriers and Opportunities	**Barriers:** • **High first cost** – E/HRVs of this caliber are premium products with high first costs attached. • **Lack of strong alignment with ASHRAE** – ASHRAE serves as an important influence point in the market, and ASHRAE's national code guidance doesn't yet require very high efficiency DOAS. In addition, ASHRAE committees' guidance doesn't adequately feature very high efficiency DOAS products. • **Complexity of system, design process and decision-making** – The system approach is more complex than the standard packaged RTU. Further, there are multiple influencers on decision-making within both the supply chain and commercial building end-users. • **Lack of awareness of product and its value proposition** – The supply chain, as well as end-users, are unaware of and do not see the value proposition for the very high efficiency DOAS approach. **Opportunities:** • **Codes** – Following the submittal of a code change proposal for 2027 IECC and/or ASHRAE 90.1-2025 in late 2024, NEEA's focus will shift to more of a support and coordination role to increase the likelihood that key elements of the proposal are incorporated into the draft code. • **High demand for non-energy benefits** – The COVID-19 pandemic and increase in wildfire smoke throughout the region for consecutive years have both increased attention to IAQ and decarbonization, which presents a timely window to drive adoption of this system approach.

Accomplishments	• Expanded the number of manufacturers with compliant E/HRVs from one to eight since 2015. Product list now includes over 100 compliant models.
	• Provided evidence to influence inclusion of DOAS in the following state and local codes:
	  ○ Washington State Energy Code (WSEC) - Requirements based on very high efficiency DOAS included in Prescriptive Path and are incorporated in Performance Path targets in 2015, 2018 and 2021 codes.
	  ○ California Title 24 - Prescriptive requirements based on very high efficiency DOAS elements included in 2022 base code to provide guidance when DOAS is selected.
	• Launched incentive strategy following transition to Market Development in late 2022 to educate and motivate early adopter manufacturer's representatives/distributors to promote the system approach. To date,

	partnerships with six representatives have been contracted and are actively tracking more than 50 project leads. • Delivered training and education to over 500 building and system designers across the region since 2022.

Section 2 – Goals & Activities

2025 Goals	Critical Activities	Target	Threshold
Promote system approach and highlight value proposition (including non-energy benefits) throughout the supply chain. *Barriers addressed:* • *Lack of awareness of VHE DOAS and its value proposition* • *Complexity of system, design process and decision making*	• Continue supporting key influencers in the HVAC design community to influence their designer, architect and installer channel partners. • Develop and implement a market engagement plan to reach target audiences throughout the region by identifying critical awareness and education opportunities across the supply chain. • Provide market channel support to participating manufacturer's representatives/distributors on marketing, education and training opportunities. • Leverage NEEA's BetterBricks platform and website redesign to extend the program's reach. • Provide project incentives to help attract champions and/or to obtain intallation data that supports tracking on market progress. • Leverage ASHRAE developments to influence specifier community. • Identify opportunities to engage with ASHRAE beyond codes, such as standards and test procedures.	Complete at least 10 awareness or educational efforts that target supply chain audiences.	Complete at least seven awareness or educational efforts to target supply chain audiences.
Increase availability of lower cost qualifying E/HRVs. *Barrier addressed:*	• Encourage priority manufacturers and suppliers to offer more qualifying E/HRV products in a wider range of capacities and price points. • Continue to support manufacturer testing to determine if less-costly	Work with manufacturers to release at least two new capacities or two new price points.	Work with manufacturers to release at least one new capacity or one new price point.

2025 Goals	Critical Activities	Target	Threshold
• *High for cost of E/HRVs*	component alternatives could be an option. • Provide midstream incentives to lower the cost of compliant E/HRVs in projects adopting the system approach.		
Build support for NEEA's proposed code changes. *Opportunity:* • *Codes*	• Develop outreach plan to identify key industry partners critical to ensuring adoption of NEEA's proposal, specifically targeting ASHRAE 90.1 and IECC. • Continue to engage in IECC and ASHRAE committees to monitor code development progress and identify opportunities for NEEA to engage. • Coordinate with applicable stakeholders to build coalition for proposal support. • Utilize lab and market research to inform standard development for E/HRV. • Leverage market data collected from representatives and manufacturers to inform code changes/support efforts.	Ensure key elements of NEEA's code change proposal are incorporated in the draft code language published by ASHRAE 90.12025 and/or 2027 IECC.	Code development committee voting margins for NEEA's proposal are closer to approval than for the analogous 2021 IECC proposal.

Product Group: Lighting

The Lighting Product Group includes the supply chain that manufactures, distributes, specifies, designs, and installs lighting products, including lamps, ballasts, controls, and fixtures as well as the end consumers who purchase these products. The workstream goal the of the Lighting Product Group is to transform the commercial lighting market so that quality, networked lighting solutions that prioritize energy savings, whole-building system integration, along with other benefits, are the default choice. There is currently one Market Transformation program in the Lighting Product Group, Luminaire Level Lighting Controls (LLLC) which targets the commercial sector.

The Lighting Product Group's strategic priorities for 2025 and beyond include:

- Building Northwest demand for networked lighting solutions, particularly LLLC, through regional and national market partnerships, utilities, trade ally networks, and energy codes.
- Leveraging NEEA's partnerships with national manufacturers for LLLC solutions to position LLLC as a priority energy efficiency tool for meeting local and state building renewal requirements, encourage alliance funders to target LLLC in their commercial and industrial programs, support code proposals favoring LLLC, and highlight success stories to influence decision-makers on the value of LLLC.

- Conducting data acquisition to deepen lighting marketing intelligence, focusing on the Non-Residential Lighting Data collection effort (NLDC) to understand overall lighting market trends, especially the lighting controls market.
- Researching the lighting controls market to better understand the evolving networked lighting solutions landscape, continue to improve LLLC product performance and specification, and understand opportunities between lighting and other building systems integration such as HVAC and Load Flexibility capabilities.
- Consider the expansion of the LLLC program to include exterior LLLC for non-municipal outdoor parking lots/structures.

Section 1 – Strategic Engagements

Organization	Value to the Northwest	Relevant Program or Opportunity
Illuminating Engineering Society (IES)	Collaboration with IES bolsters credibility for LLLC through national lighting practice recommendations.	LLLC
Design Lights Consortium (DLC)	The DLC facilitates adoption of LLLC through a national technical specification and qualified product list.	LLLC
U.S. Department of Energy Integrated Lighting Campaign	The DOE campaign provides national examples of LLLC projects and their value proposition and bolsters credibility of LLLC.	LLLC
Minnesota Center for Energy and Environment (MN CEE)	Coordination with MN CEE's LLLC MT program ensures consistent approaches and messaging and avoids market confusion.	LLLC

Program Name: Luminaire Level Lighting Controls

ILC Phase: Market Development

Executive Summary – The LLLC program uses a multi-faceted approach that incorporates efforts to bolster demand for LLLC, increase sales promotion in region, strengthen skills needed for successful project delivery, and leverage complimentary national efforts so that LLLC systems become standard practice for commercial buildings.

In 2025, the program will continue to increase market adoption of LLLC by leveraging the local sales channels, key lighting specifiers and targeted professional associations to influence decision-makers on the full value and relevance of LLLC for their business. The program will also continue to support educational efforts targeted at perceived barriers to adoption, as well as continue collaboration with alliance funders to increase acceptance of LLLC. Additionally, the program will continue to coordinate with national organizations, such as the DOE, IES and DLC to strengthen their focus on LLLC. Program partnerships beyond the Northwest will also encourage other regions to focus on LLLC, in turn creating market alignment and amplifying impact.

Also in 2025, NEEA staff will continue considering the feasibility of expanding the program scope to include exterior LLLC in outdoor parking lots (non-municipal applications). If incorporated into the program, efforts on exterior LLLC would be small scale and opportunistic in 2025 with more fully developed opportunities rolled out in 2026.

Section 1 – Program Overview

Market Transformation Theory	LLLC, a growing subset of Networked Lighting Controls (NLC) with sensors in each fixture, bring simplicity, flexibility and high-quality lighting experience, while delivering greater energy savings alongside non-lighting business benefits. These advantages build a path for much broader adoption. Yet, for LLLC to gain widespread market adoption, LLLC-specific barriers need to be addressed. Cost is still higher than basic control systems or first generation NLC. In addition, both those who specify lighting projects (designers, engineers, and installers) and their customers have not yet fully embraced LLLC's value proposition and still hold misperceptions based on their experience with the older control technology. To address these barriers and leverage LLLC's unique value proposition, the program engages key manufacturers and their supply chain to enhance promotion and sales in the Northwest, builds market awareness and capabilities via regional and national industry organizations as well as key market influencers and early adopters, and supports integration of LLLC into energy codes. As a result, over time LLLC will become standard practice in new and existing commercial buildings.
Current Market Barriers and Opportunities	**Barriers:** • **Product readiness:** Continue to influence improvements in usability and installation ease by leveraging the sufficient availability of qualified products. • **Trade ally knowledge and capabilities:** Address sales, design, specification, installation, set up and programming skills and work to dispel myths based on experience with previous generations of lighting controls. • **Awareness of value proposition:** Continue to increase the understanding and acceptance of LLLC lighting, energy and other business benefits by decision-makers and influencers. • **First cost:** Maximize on incremental cost reductions and continue to support utility program downstream incentive programs. **Opportunities:** • **Business benefits beyond LLLC energy efficiency opportunity:** Leverage extensive benefits related to data collection and connectivity with other building and business systems to expand market adoption. • **Solid state lighting trends:** Leverage the strong interest in adopting LEDs by promoting LLLC as best LED option. • **Manufacturer investment:** Increase awareness of LLLC benefits to manufacturers by highlighting the ways LLLC expands the value of lighting for their customers by offering business benefits, such as data and connectivity. • **Extra-regional interest:** Deepen extra-regional understanding and interest in LLLC to create larger demand signal to manufacturers.

Accomplishments	• Published second Market Progress Evaluation Report. The MPER indicated progress, with findings showing that companies were more likely to have LLLC trained installers and designers were much more likely to recommend and include LLLC in their plans. • Worked with Federal General Services Administration to include LLLC in its recommendations for federal agencies to select the most cost effective and energy-efficient lighting system. • Worked with DOE to incorporate LLLC as a requirement in its L-Prize competition, which is designed to highlight the future of illumination in commercial buildings. • Influenced strong and increasing availability of qualified products, with 60 LLLC systems now available from 36 manufacturers, including all major lighting control manufacturers. • Established collaborative partnerships with nine manufacturers to increase promotion through their regional sales channels. • Collaborated with over 12 professional associations and with NEEA funders to educate market actors on LLLC topics, build skills, feature success stories and highlight accomplishments of influential specifiers. • Continued strong earned media coverage demonstrating interest in LLLC.

Section 2 – Goals & Activities

2025 Goals	Critical Activities	Target	Threshold
Bolster demand of LLLC products and increase decision-maker acceptance of the LLLC value proposition. *Barriers addressed:* • *Awareness of value proposition* • *First cost*	• Highlight early adopter success stories via earned media and collaborative activities with BetterBricks platform, professional associations, utilities and manufacturer sales channels. • Spotlight best practices and lessons learned to overcome challenges in projects in order to address perceived barriers to successful adoption. • Seek a variety of LLLC success stories, reflecting multiple building applications, market actors involved and geographies. • Feature market influencers to articulate value proposition, with an aim of strengthening decision-maker desire and ability to prevent LLLC from being value engineered out of projects. • Leverage federal General Services Administration (GSA) lighting controls guidance and upcoming IES standard practice recommendations to validate and	Feature four new LLLC success stories in earned media or at professional association events.	Feature three new LLLC success stories in earned media or at professional association events.

2025 Goals	Critical Activities	Target	Threshold
	position LLLC as a credible and attractive lighting solution.		
Strengthen focus and promotion of LLLC by key manufacturer sales channels to motivate more sales professionals to champion LLLC to their customers. *Barrier addressed:* • *Awareness of value proposition*	• Strengthen engagement of targeted manufacturers and their priority local manufacturer representative agencies and distributors to ensure they are well positioned to feature LLLC in the region. • Amplify impact of existing champions of LLLC in the sales channel by highlighting local manufacturer representatives' success. • Develop additional champions for LLLC, particularly in geographies with historically low awareness and adoption.	Collaborate with 32 local manufacturer representatives to feature LLLC in strategic meetings or events targeting specifiers, of which 25% (8) will be representatives who have not previously featured LLLC.	Collaborate with 28 local manufacturer representatives to feature LLLC in strategic meetings or events targeting specifiers, of which 25% (7) will be representatives who have not previously featured LLLC.
Influence leading lighting designers, engineers and installers to include LLLC in their ongoing business practices *Barriers addressed:* • *Awareness of value proposition* • *Trade ally knowledge and capabilities*	• Engage influential market actors to disseminate LLLC business case to peers and seek to expand the range of industry voices carrying the LLLC message. • Collaborate with the market to reinforce the value of LLLC to their own business and their clients' business via earned media and collaborative activities with BetterBricks platform, professional associations, utilities and manufacturer sales channels. • Continue targeted educational efforts to address perceived barriers to adoption and bolster knowledge needed to protect against LLLC being value engineered out of projects. • Seek to reach new entrants to lighting industry and to leverage additional influential market aggregators.	Collaborate with eight lighting designers, engineers, or installers, of which at least 50% (4) have not previously partnered with the program, on media content, events, or educational activities.	Collaborate with six lighting designers, engineers, or installers, of which at least 50% (3) have not previously partnered with the program, on media content, events, or educational activities.

2025 Goals	Critical Activities	Target	Threshold
Increase visibility and demand for LLLC through strategic national engagements to build scale. *Barriers addressed:* • *Awareness of value proposition* • *First cost*	• Continue to engage IES controls committees to expand inclusion of LLLC in their recommendations. • Engage influential national organization such as DLC and DOE's Integrated Lighting Campaign to strengthen focus on LLLC. • Engage select extra-regional partners, including MNCEE, to create greater visibility within the market. • Leverage commercial policy mandates, such as the Washington Clean Buildings bill, to position LLLC as a key strategy for building owners to meet new aggressive goals. • Continue to influence code updates that incorporate LLLC as a way to meet code.	Strengthen strategic alignment with four national or extra-regional partner organizations.	Strengthen strategic alignment with three national or extra-regional partner organizations.

Product Group: Motor-Driven Systems

The Motor-Driven Systems Product Group encompasses motors, end-use equipment such as pumps, fans, and compressors, as well as related sensor and control technologies such as variable speed drives. Key stakeholders include those involved in the supply chain who manufacture, distribute, design, specify, install, and influence the decision-making and purchase of such equipment and systems. This Product Group includes two programs: Efficient Fans and Extended Motor Products (XMP) Pumps.

The Product Group strategy is focused on driving the market to adopt motor-driven products designed to optimize system efficiency, often through integrated sensors and speed control. To this end, the key priorities for 2025 include:

- Increase pump manufacturer representative territory coverage and explore expanding XMP program scope to serve other markets such as chemical or agriculture.
- Build interest in a fans coalition to promote more participation from manufacturers in the Air Movement and Control Association (AMCA) existing voluntary program and explore creation of Fan Energy Index (FEI) levels beyond federal minimums.
- Continue work through the Motors Coalition, a group of motor industry, energy efficiency advocates and utility partners, to develop a voluntary motors label based on the Power Index metric, which will support a Market Transformation program for variable speed drives.
- Continue emerging tech research and learnings into Power Index metric limitations, variable speed drive technology and application opportunities, and expanded scope market opportunities for XMP.
- Conduct motor-driven systems industrial market research, which will benefit the Product Group and both programs.
- Explore developing a cross-Product Group engagement plan for specifiers and code enforcement officials to educate on the existing program's objectives and value propositions.

Section 1 –Strategic Engagements

Organization	Value to the Northwest	Relevant Program or Opportunity
Hydraulic Institute (HI)	Partnership with HI provides access to the national perspective, strong collaborative partnership on advancing Smart Pump technology and adoption with manufacturers, and a seat at the table to increase visibility and influence.	XMP-Pumps
Air Movement and Control Association (AMCA)	Working with AMCA enables access to manufacturers and a seat at the table for future standards and voluntary programs, accelerates the path toward a fans coalition, and builds on existing relationships for future opportunities.	Fans
National Electrical Manufacturers Association (NEMA)	NEEA will examine the potential for this association more closely in 2025, as it may play a significant role in the launch and growth of a voluntary motor labeling initiative focused on the Power Index (PI) metric.	Motor-Driven Systems Scanning
Electro Mechanical Authority (EASA)	NEEA will examine the potential for this association more closely in 2025, as it may have an influential impact on the growth of a voluntary motor labeling initiative focused on the Power Index (PI) metric.	Motor-Driven Systems Scanning

Program Name: XMP – Pumps

ILC Phase: Market Development

Executive Summary – The XMP – Pumps program works to transform the pumps and circulators market toward high efficiency systems. In 2024, multiple manufacturers launched new smart pump and smart circulator products with electronically commutated motors (ECMs), which is helping more pump buyers, specifiers, sales engineers, and facility managers become aware of the benefits of these more efficient options. Regional sales data trends are positive, showcasing clear progress among innovators and early adopters. Critical work is still ahead to gain traction among the majority of pump decision makers.

In 2025, the program will continue to focus on reducing and removing market barriers to widespread adoption of efficient pump equipment. Geographic expansion and exploration of opportunities with additional pump types and sectors remains a priority for 2025, including the agriculture, industrial and municipal pumping markets. In collaboration with NEEA funders and stakeholders, the program team is exploring opportunities to expand the program into larger pump types, pumps not covered by DOE's Pump Energy Index (PEI) but which may be possible to test and rate under the Energy Rating label (ER) program, and potential load flexibility opportunities through NEEA's engagement with the pump industry trade association, HI. In addition, the program will seek to influence pump OEMs and HI to more aggressively market smart pumps and pumps featuring high ER label scores, further grow smart pump offerings to cover more pump types and larger pumps, produce more smart pump case studies, and work with HI to make the ER label more useful to specifying engineers.

Section 1 – Program Overview

Market Transformation Theory	Clean water pumps are abundant in the commercial, industrial, agriculture and municipal water markets. The XMP program is focused on driving the adoption of advanced pump technology including integrated smart pumps in these markets. However, there is a lack of awareness, lack of confidence, and product performance concerns in smart pumps and advanced pump technology by key market actors. To address these barriers and enable diffusion, the XMP program develops deep relationships with manufacturer's representatives to raise awareness and understanding of smart pump technology and develops tools to support savings validation. Agreements are formalized to provide ongoing support to manufacturer representatives and create a confidential process for sharing sales data. The program conducts research to validate and demonstrate reliability and ease of maintenance, along with producing case studies that demonstrate the product advantages, cost-effectiveness, and reliability of smart pumps. This information is shared with manufacturer's representatives to leverage in market engagement and training opportunities, as well as supporting broader market awareness that touches market actors. The program also works with the Hydraulic Institute to improve and influence the Energy Ratings label, which offers a mechanism for product differentiation for smart pumps, hence improving awareness. Close collaboration with the Hydraulic Institute, along with market actors such as manufacturers and manufacturer representatives, will allow NEEA to influence specifications and test procedures that result in comment letters to DOE to influence federal performance standards for pumps.
Current Market Barriers and Opportunities	**Barriers:** • Lack of awareness for smart pumps. • Low confidence in smart pump performance. • First cost and lack of perceived value proposition. **Opportunities:** • Leverage ER label and Hydraulic Institute relationships to build awareness • Maximize on the first-ever federal standard for circulators adopted by DOE (effective 2028). • Smart pump products have increased in size and availability, and more manufacturers are focusing on expanding their electrically commutated motor (ECM) product lineup.
Accomplishments	• Achieved year-over-year growth in smart pumps and smart circulators as a portion of overall sales. ○ Rose from 17% in 2022 and on track to exceed 22% in 2024. • Collaborated with four participating firms to deploy hands-on demonstration units in 2024, which increases opportunities for specifiers to interact with and understand smart pump technology. • Supported engagement of circulator manufacturers' representative firms and key contractors/installers to promote and sell Smart Circulators, drive sales growth, and reach new market actors. • Completed first Market Progress Evaluation Report (MPER). • Supported a first-ever DOE federal standard for circulators that was passed into law in 2024, which mandates ECM or equivalent performance upon its

	effective date in 2028. NEEA provided comment letters and anonymized sales data to inform DOE's standard setting process.

Section 2 – Goals & Activities

2025 Goals	Critical Activities	Target	Threshold
Motivate participating manufacturer' representative firms to preferentially stock and increase sales of smart pumps and smart circulators. *Barrier addressed:* • *Specifiers and buyers do not prioritize smart pumps and circulators.*	• Design, implement and manage midstream smart pump and smart circulator bonus structures for each participating manufacturer representative, informed by learnings from prior years and MPER #1 findings. • Provide detailed reports and analysis to all participating firms, reviewing progress through monthly or bi-monthly meetings, tracking efficiency progress, and collaborating on marketing and awarness building opportunities.	Reach market share of 23% for smart pumps and smart circulators among manufacturer representative firms participating for more than one year	Reach market share of 18% for smart pumps and smart circulators among manufacturer representative firms participating for more than one year
Raise awareness of the value of efficient pump products, the use of the ER label and smart pumps. *Barrier addressed:* • *Specifiers and buyers lack awareness and understanding of smart pumps and circulators.*	• Solicit program support proposals from participating distributors, and award funding to the companies and co-investment opportunities that are deemed most likely to increase efficient sales. • Sponsor Hydraulic Institute training and education programming, and smart pump marketing efforts. • Organize, speak at and participate in regional events where NEEA staff and/or contractor field team members can help audiences like engineers, contractors and installers gain more confidence in the reliability and advantages of smart pumps. • Complete and publish additional in-depth case studies about Northwest installations of smart pumps in partnership with Northwest utilities. • Complete "Industry Voices" video interviews with influential smart pump early adopters.	Complete 30+ high-impact awareness building activities, including: smart pump education events, case studies, or "Industry Voices" cideos published on BetterBricks.	Complete 15+ high-impact awareness building activities.
Accelerate program participation by growing the number of	• Motivate a consistent or increased number of manufacturer representative firms to participate.	Increase participation	Increase participation of firms to

2025 Goals	Critical Activities	Target	Threshold
participating manufacturer representative firms, and by expanding the program scope into additional markets. *Barrier addressed:* • *Suppliers and buyers are reluctant to select smart pumps due to other factors that take priority over efficiency.*	• Conduct data-focused outreach to two+ potential new participants, screening them by sales volume, product mix and geographic reach. • Engage with manufacturers and Hydraulic Institute staff and committees on improvements to the ER Label program, education, marketing, and Pump Systems Matter Board. • Pursue additional participation by representative firms in the irrigated agriculture and municipal clean water pumping market.	of firms to 11 participants.	nine participants.

Program Name: Efficient Fans

ILC Phase: Program Development

Executive Summary – The Efficient Fans program works with manufacturers and manufacturer representatives to leverage FEI to increase efficient fans sales and educate the market on the advantages of efficient fan systems. The program focuses on commercial and industrial fans with a Fan Energy Index (FEI) > 1.00 that are sold as standalone fans or fans embedded in other packaged equipment that do not have an established energy-efficiency metric. Examples of such fans include exhaust, custom air-handling, and industrial process equipment.

Key activities in 2025 include maintaining existing relationships with two manufacturers for data acquisition and optimizing fan selection software to highlight FEI. The program will also prioritize adding representatives and seek to understand key influencers and communication channels for fan specifiers to test program messaging. The program will leverage the BetterBricks platform to test and refine messaging to representatives and specifiers and highlight advantages and non-energy benefits of efficient fans. NEEA will convene a fans coalition of manufacturers, utilities, and energy efficiency organizations to create the next level of federal FEI minimums and make recommendations to DOE on future test procedures and federal standards that result in more efficient fan systems. The program will test the accuracy of the product definition through sales data identifiers and market feedback, as well as technical limitations to fans system efficiency. Lastly, NEEA will work with states to reference FEI with increasing stringency in codes during the code proposal process.

Section 1 – Program Overview

Market Transformation Theory	Efficient fans have approximately 138 aMW of program savings opportunity but face a number of market barriers. The main barriers to realizing these savings are the low awareness of the FEI metric and efficient fans among manufacturer representatives and market actors, as well manufacturers fan selection software that does not prioritize FEI. To overcome these obstacles the program will partner with leading manufacturers to optimize fan selection software to highlight FEI and develop a compelling value proposition for efficient fans. The program will engage manufacturer representatives to increase FEI awareness and prioritize efficient fan sales, while collaboration with trade associations and member groups will educate specifiers and installers on the benefits of efficient fans. Over time, the program will work to phase out the lowest cost fans, thereby raising the minimum FEI available in the market. These combined efforts, alongside advancing standards and DOE FEI minimums, will promote the selection and adoption of more efficient fans across the market and set the path toward achieving an overall increase in fan efficiency by 2041 that is 25% better than the 2021 baseline.
Target for Program Advancement	Program projected to advance to Market Development in 2026.

Section 2 – Program Development Activities

2025 Activities	Estimated Timing
Gather data and insights from market actors to inform program messaging and education activities.	Data and/or message testing results from 2-3 new partners by Q4 2025
Conduct research to understand fan purchasing and decision-making process between supply chain and market actors.	Completed Q3 2025
Conduct research to identify potential technical barriers to refine market transformation interventions and determine efficient fan product availability.	Completed Q3 2025
Assess data quality, create naturally-occurring market baseline (used for savings forecasts and reporting), and conduct third party review of baseline and other key assumptions.	Completed Q4 2025

Product Group: Water Heating

The Water Heating Product Group includes natural gas and electric water heaters and the supply chain that manufactures, distributes (wholesale and retail), specifies, designs and installs commercial and residential water heaters and the end consumers who purchase these products. There are two programs currently in the Water Heating Product Group, the Advanced Commercial Gas Water Heating program and the electric Heat Pump Water Heater (HPWH) program.

2025 will see a shift in the Natural Gas portfolio from supporting the residential Efficient Gas Water Heating program to focusing on the Advanced Commercial Gas Water Heating program and exploring dual-fuel opportunities that offer energy efficiency and load flexibility benefits in the residential, commercial and multifamily sectors. Lab testing gas heat pump technologies and dual-fuel configurations will inform energy savings and load flexibility potential, while demonstration projects will provide opportunities to engage with the supply chain to learn about in-field performance. The electric HPWH program will continue working to improve market acceptance of residential and low-rise multifamily HPWH applications and reducing market resistance, both regionally and nationally, for the new federal standard which goes into effect in 2029. This includes increased focus on strengthening the installer network throughout the region and leveraging national partnerships to continue aligning voluntary specifications (ENERGY STAR, CEE, ASHRAE) and increasing national acceptance of HPWH technology. These actions will help ensure satisfactory performance for new and existing HPWH products, new innovations for complex installations, and increased HPWH adoption in all residential customer segments.

Section 1 –Strategic Engagements

Organization	Value to the Northwest	Relevant Program or Opportunity
Nicor Gas	Collaboration with Nicor Gas supports coordination of Market Transformation strategies to increase scale and accelerate Northwest and national market transformation goals.	Advanced Commercial Gas Water Heating
Portland General Electric (PGE)	With PGE, NEEA is piloting HPWH load flex capabilities in multi-family with central and unitary systems.	HPWH, End Use Load Flex
Environmental Protection Agency (EPA)	In collaboration with EPA, NEEA is supporting alignment of Advanced Water Heating Specification (AWHS) and ENERGY STAR to establish consistent efficiency targets for new and existing HPWH technology and prepare the market for the new federal standard.	HPWH
Consortium for Energy Efficiency (CEE)	NEEA influence of the IRA Water Heating specification to align with AWHS will increase available incentives for AWHS products	HPWH, Advanced Commercial Gas Water Heating

North American Gas Heat Pump Collaborative (NAGHPC)	Collaboration on market research and product testing opportunities will inform market transformation strategies that support gas heat pump adoption.	Advanced Commercial Gas Water Heating
Advanced Water Heating Initiative (AWHI)	AWHI facilitates national HPWH conversations to advance product development and HPWH adoption. NEEA leads updates to the AWHS to standardize ongoing product optimization and connectivity details.	HPWH, End Use Load Flex
OpenADR Alliance	Through OpenADR, NEEA can inform connectivity standards to incorporate Demand Response (DR) capabilities in HPWH products that enable utilities and aggregators to cost-effectively manage flexible load potential.	End Use Load Flex
Air-Conditioning, Heating, and Refrigeration Institute (AHRI)	Collaboration with AHRI enables partnerships to manage HPWH qualified product lists (QPLs) and quality assurance programs.	HPWH, Advanced Commercial Gas Water Heating

Program Name: Heat Pump Water Heaters

ILC Phase: Market Development

Executive Summary – The HPWH program aims to increase the adoption of HPWHs for emergency replacements, planned replacements, and new construction in single-family homes and low-rise multifamily dwellings. Since 2011, NEEA has worked to transform the water heating market and made significant progress in influencing manufacturers to invest in advanced technology performance as well as overcoming key barriers to market adoption.

The alliance's success in addressing barriers in the Northwest helped to demonstrate that broad national adoption of HPWH technology is feasible and that the market is ready for a federal standard mandating heat pump-level efficiency for most of the market. In October 2022, NEEA joined manufacturers, energy efficiency organizations, and a consumer organization in recommending efficiency levels for the DOE's rulemaking process. NEEA's participation aimed to ensure that the needs of Northwest consumers—including those in cold climates and with challenging installation locations, as well as across all income levels—were met.

In May 2024, the DOE published a final rule mandating a shift for most electric storage water heaters to heat pump technology by 2029. The DOE cited the joint recommendation as evidence that manufacturers can meet the proposed standards and that consumers will benefit, as shown by their analysis. This milestone is significant as it supports the transition of the majority of the market to HPWHs. NEEA's ongoing engagement is crucial for preparing the region to adopt and benefit from the new standard. Building on the momentum of 2024, activities in 2025 will continue to focus on strengthening the workforce and engaging both regionally and nationally to identify barriers and solutions to increase adoption in areas and populations with low adoption rates.

Section 1 – Program Overview

Market Transformation Theory	To overcome barriers and accelerate the market adoption of HPWH, the alliance works to: 1) influence ENERGY STAR and federal test procedures to incorporate key elements of the AWHS thereby creating national alignment and laying the ground work for a federal efficiency standard; 2) participate in federal standards rulemaking process by sharing data and building alignment with stakeholders; 3) work upstream with water heater manufacturers to influence product development; 4) train the supply chain in HPWH technology until it becomes standard practice; and 5) continue to increase awareness and demand for HPWH among consumers on a regional and national level. By executing these strategies to address key barriers, the program will achieve a federal standard that shifts the majority of the market to HPWH, position HPWH has the dominant and preferred technology for electric storage water heating and achieve these significant savings benefitting the region, and nation, for future generations.
Current Market Barriers and Opportunities	**Barriers:** • **First cost** remains a barrier to HPWH adoption, preventing more widespread adoption of the technology. • **Installers remain resistant** to HPWH technology due to installation challenges, reliability, and callback concerns. • Most consumers rarely think about their water heaters and **low HPWH consumer awareness** continues to be an adoption barrier. • **Market adoption outside the Northwest remains low** and could cause national resistance, workarounds, or rollbacks that would greatly reduce regional benefit from the standard. **Opportunities:** • **Offset first cost** via Inflation Reduction Act (IRA) HPWH incentives. • **Leverage new Federal Standard implementation timeline** to engage tool with installers and manufacturers. • **Support new HPWH products** coming to market, some of which include solutions for challenging installations. • **Expand the value proposition for** HPWHs to include flexible load benefits and highlight the product as a key tool in meeting decarbonization policy requirements.
Accomplishments	• Supported the Consumer Water Heating Final Standard which was released May 2024, and requires HPWHs for all storage water heating over 35 gallons starting May 2029. • Provided joint recommendation, which is referenced throughout the Consumer Water Heating Final Standard. • Increased market share from 2022 to 2023 despite economic indicators of slowdown. • Continued to socialize NEEA's 'Amazing Shrinking Room' study, resulting in references to the study in federal documents.

	• Launched the multi-year Hot Water Innovation Prize in Q1 2024 to stimulate manufacturers solutions for the low-rise multifamily market. • Completed a full year of distributor data processing in-house, optimizing the process and providing better insights of market analysis to distributor partners. • Continued growth in Montana and Idaho markets year-over-year as seen through distributor data (20% growth from 2022 to 2023). • Documented a 20% increase in regional installers who list HPWH as a service on their websites. • Added new manufacturers to QPL. • Launched the *Level Up* consumer consideration campaign and simultaneously completed modernization and relaunch of the Hot Water Solutions consumer website.

Section 2 – Goals & Activities

2025 Goals	Critical Activities	Target	Threshold
Increase confidence and technical capability of HPWH installers in the Northwest for single family and low-rise family applications *Barrier addressed:* • *Supply chain is resistant to install HPWHs.*	• Expand Hot Water Solutions' in person training to include architects, designers, property managers, and HVAC and plumbing students entering the workforce. • Leverage partnerships with manufacturers, distributors, and manufacturer representatives to ensure training opportunities, and strong technical and warranty support, are accessible to installers throughout the region. • Continue to engage with targeted installers throughout the region to provide individualized support to increase their adoption of HPWHs. Provide technical support, website content, promotions, lead generation, and opportunities for inexperienced installers to install HPWHs in straightforward installation applications. • Review, update, and expand technical assets on Hot Water Solutions to support installation best practices for both installers and DIY audiences. • Research and document key barriers to expanding Oregon specialty plumbing license model nationally. • Conduct quantitative research to analyze nature of callbacks on HPWHs.	Increase number of installation companies listed on Hot Water Solutions by 25%.	Increase number of installation companies listed on Hot Water Solutions by 15%.

2025 Goals	Critical Activities	Target	Threshold
	• Coordinate on existing research and support additional technical research to develop best practices for adjacent technologies affecting HPWH performance (recirculator pumps, mixing valves, etc.).		
Leverage national and extra regional partnerships to increase consistent adoption of HPWHs nationally to ensure market readiness for the 2029 federal standard. *Barrier addressed:* • *HPWH adoption is not uniform across U.S. market.*	• Maintain AWHS QPL. • Develop long term strategy for AWHS and QPL, including role in ensuring quality, product variety and entrance of lower cost options. • Engage with ENERGY STAR and CEE to encourage specification alignment. • Coordinate with major manufacturers to document barriers to meeting standard timeline and map out solutions to support transition. • Engage with key local and national retailers to encourage promotion of HPWHs. • Participate in Advanced Water Heater Initiative and provide leadership to steering committees. • Develop national actor matrix to identify potential organizations to expand key partnerships that increase consistent adoption of heat pump water heaters nationally.	Strengthen strategic relationships with five national or extra regional organizations.	Strengthen strategic relationships with two national or extra regional organizations.
Increase customer awareness and demand among populations with low adoption. *Barrier addressed:* • *Consumers are unfamiliar with efficient water heating technologies.*	• Deploy consumer consideration campaign focusing on geographic areas of low adoption. • Explore solutions for first cost, such as financing, online marketplace, front loading tax credits through tax consultants. • Provide technical expertise and training to support state and local housing agencies in reaching their goals. • Collaborate with regional utilities to understand low adoption populations within service territories. • Expand training and marketing assets to increase geographic and customer reach. • Gather demographic information through consumer awareness surveys.	Identify two low adoption populations in the Northwest and document baseline, barriers and opportunities.	Identify one low adoption population in the Northwest and document baseline, barriers and opportunities.

2025 Goals	Critical Activities	Target	Threshold
	• Work with manufacturers to identify and develop solutions for efficient water heating in low rise multifamily. • Use existing data to identify baseline trends in adoption for the following: site-specific installation location, geographical region and climate zone, and consumer demographics.		

Program Name: Advanced Commercial Gas Water Heating

ILC Phase: Program Development

Executive Summary – The Advanced Commercial Gas Water Heating program focuses on accelerating technological advancements and market availability of advanced commercial gas water heating systems, including commercial gas heat pumps (GHPs), resulting in reduced gas consumption and carbon emissions in the commercial and multifamily sectors. The Program Development phase allows NEEA to learn more about gas heat pump technology and other advanced efficient system configurations and market conditions through product testing, validation and market research; develop intervention strategies to remove identified barriers; and validate the gas savings and carbon reduction potential of these systems. The program is currently focused on product testing and deployment, engaging the supply chain, and completing a market research effort, which will inform the more robust market characterization effort and program strategy.

In 2025, the program will conduct demonstration projects to validate product performance and savings potential and inform design and installation best practice guidance. The program will explore dual-fuel system solutions and load flexibility opportunities. The program will conduct a market characterization study that will help refine NEEA's understanding of the barriers to gas heat pumps, dual-fuel, and other advanced efficient system adoption in the North American commercial water heating market and help to build a value proposition for key decision makers, informing program strategy and potential utility incentive programs.

Section 1 – Program Overview

Draft Market Transformation Theory	Advancements in commercial gas water heater efficiency have been limited due to design complexity, high first costs, low market awareness, and a limited understanding of the value proposition to building owners, developers and designers for efficient gas water heating solutions. NEEA will demonstrate the energy savings and flexible load potential of gas heat pumps and dual-fuel configurations while offering design, installation, and operational guidance that increases the value proposition for building owners and actors throughout the supply chain to promote, sell and install gas heat pumps. The increased market adoption of efficient commercial gas heat pumps and dual-fuel configurations will provide the evidence necessary to influence federal standards that mandate progressively higher efficiencies for gas water heating equipment.

	Eventually, Thermal Efficiency values exceeding 1.0 will become the minimum standard for commercial gas water heaters.
Target for Program Advancement	Program projected to advance to Market Development in Q3 2026.

Section 2 – Program Development Activities

2025 Activities	Estimated Timing
Engage with manufacturers to influence product design, understand their go-to-market strategies, marketing, and promotion plans, certify and support products, and support midstream training initiatives.	Q1 – Q4 2025
Execute and monitor field demonstrations to validate performance and savings, target market, challenges, and inform training opportunities.	Q1 2025 – Q1 2026
Model and lab test gas heat pump technology and dual-fuel opportunities to further inform value proposition and savings potential.	Q3 2025
Complete market characterization of commercial water heating market in select North American regions in partnership with Canadian and U.S. utilities.	Q4 2025

Enabling Infrastructure

Enabling Infrastructure programs support regional energy efficiency and NEEA's Market Transformation programs by building market capability, awareness and demand for energy-efficient products, services and practices. NEEA's infrastructure programs in 2025 are: BetterBricks and the Integrated Design Labs.

Program Name: BetterBricks

Executive Summary – The BetterBricks infrastructure program is designed to support the removal of persistent market barriers in commercial buildings through a consistent, coordinated, and cost-effective centralization strategy. This provides a pathway for intervention strategies for NEEA's Market Transformation programs, as well as supports interest and capability of the market to participate in local efficiency programs.

The program identified several opportunities for 2025 to support the market's need for innovative solutions, unbiased information, and streamlined compliance assistance.. To capitalize on these opportunities, the program will focus on enhancing its digital presence, building stronger relationships with industry influencers, increasing awareness, strengthening positioning in the market, and focusing more on rural markets. To maximize on these efforts in 2025, the BetterBricks program will focus on:

1. Raising awareness of and demand for energy-efficient and grid-interactive efficient buildings (which utilize grid-enabled end-use technologies).
2. Helping the market translate GHG reductions resulting from energy-efficient and "smart" building investments into competitive business advantage.
3. Creating and/or curating entry-level energy efficiency content and resources relevant to a wider audience of Northwest consumers.

Section 1 – Overview

Description	The BetterBricks infrastructure program is designed to support the removal of persistent market barriers in the commercial real estate sector through a consistent, coordinated, and cost-effective centralization strategy. This approach ensures that BetterBricks can maintain a steady level of awareness among market actors, providing alternatives to conventional approaches in designing, operating, and investing in buildings that incorporate energy-efficient solutions. BetterBricks supports multiple Market Transformation programs by addressing commonly shared barriers such as low awareness, lack of understanding of value propositions, lack of market capacity and skills, and resistance to change. By focusing on these adoption barriers and utilizing broad, high-level messaging, BetterBricks helps maintain a stable market perception and builds trust and awareness, which in turn supports the deeper, more targeted Market Transformation efforts led by individual programs.
Value to the Northwest	Awareness and positioning investments made through BetterBricks result in lasting benefits and compounding value over time given the infrastructure's perpetual nature. This foundational level of awareness benefits both current and future programs, as they do not have to build such awareness from scratch. By consistently promoting energy-efficient solutions and maintaining market engagement, BetterBricks supports the broader goals of NEEA and its funders, ensuring that the market remains receptive to new initiatives and programs. This approach enhances the efficiency of fund utilization by streamlining efforts and reducing redundancy. By coordinating engagements and maintaining a centralized commercial engagement strategy, BetterBricks ensures that resources are used more effectively, avoiding the pitfalls of fragmented efforts. This coordination reduces market confusion, saves time and money, and maximizes the impact of each engagement by leveraging shared insights and strategies across multiple programs.

Section 2 – Goals & Activities

2025 Goals	Critical Activities	Target	Threshold
Influence commercial building industry perspectives and practices	**Develop and deploy original content:** • Create and disseminate success stories that highlight the positive impact of energy-efficient and load flex solutions and provide real-world testimonials for industry peers to adopt similar practices. • Continue hosting the BetterBricks-led webinar series to offset technology-specific content and provide market education around high-value topics, such as the role of energy efficiency and load flex in decarbonization strategies. • Develop and/or direct target audiences to tools and resources that support the adoption of whole-building upgrades. **Reach target audiences through partnerships with trade organizations and industry influencers:** • Build and strengthen relationships with trade organizations and industry influencers to amplify message and reach a broader audience, including through content co-development and promotion. **Participate in regional education events:** • Engage in regional educational events— including trade shows, conferences, webinars, and lunch-and-learns—that provide a platform to reach and educate target audiences on whole-building technologies and solutions.	Engage in 15 market events. Publish 10 pieces of original content.	Engage in 10 market events. Publish seven pieces of original content.
Increase BetterBricks brand awareness and audience reach.	**Drive website traffic through owned channels:** • Finalize and launch rebuilt BetterBricks.com (est. Q2 2024) and work with market partners and funders to promote and drive traffic. • Develop and deploy a monthly newsletter—segmented by audience types and interests—to disseminate BetterBricks, program, and industry content, news, events and resources, and drive traffic to BetterBricks.com. • Engage with target audiences and drive website traffic through BetterBricks social channels, LinkedIn and YouTube. • Improve BetterBricks website search engine optimization (SEO) to increase BetterBricks discoverability, intervene in relevant web searches, and drive new and qualified visitors to the website. **Drive brand awareness and website traffic through promotional channels and efforts:**	Increase website traffic by 12% from 2024.	Increase website traffic by 8% from 2024.

2025 Goals	Critical Activities	Target	Threshold
	• Develop and deploy a targeted paid media campaign to reach more and drive mid- and up-stream decision makers to BetterBricks.com. • Sponsor industry events and conferences to increase awareness where target audiences are in attendance. **Drive delivery of energy efficiency opportunities to all NW customers through awareness and education:** • Curate and/or create customer case studies and testimonials to reflect energy efficiency's benefits and applicability to a greater variety of audience and building types, including in rural areas and smaller projects. • Partner with local organizations and industry influencers to expand BetterBricks' reach in lower-reach markets.		

Program Name: Integrated Design Labs

Executive Summary – The mission of the Integrated Design Labs (IDLs) is to transform the design, construction, and operations of commercial, institutional, and residential buildings to advance energy-efficient, high-performance, and healthy buildings in the Northwest. IDLs exist at Universities of Idaho, Oregon and Washington, and Montana and Washington State Universities. The IDLs are a critical partner to alliance programs, accelerating Market Transformation through research, technical assistance and education utilized by NEEA programs and market partners. There are two types of NEEA funding for the IDLs: (1) Base funding, which funds lab operations, such as exploratory research, facility and equipment costs, and/or staff; and (2) Services funding, which provides funds for discreet projects. Services funding supports NEEA's Emerging Technology and program work and is included in other Operations Plans and budgets.

Section 1 – Overview

Description	The IDL network plays a crucial role in advancing sustainable design and energy efficiency across the Northwest. By partnering with major universities in the region, including the University of Washington, University of Oregon, Montana State University, University of Idaho, and Washington State University, the IDLs have created a collaborative environment that fosters innovation and practical solutions for high-performance buildings. This network has directly influenced the design and construction of hundreds of buildings, resulting in significant energy savings and positioning the Northwest as a national leader in energy-efficient design. The IDL network provides support to various stakeholders, including architects, engineers, and policymakers by offering technical assistance, conducting research, and

	developing educational programs. The IDL network has been instrumental in refining methodologies for energy code compliance and providing research support for state energy code change proposals. Their efforts enhance the region's energy efficiency and contribute to the overall sustainability and resilience of the built environment in the Northwest.
Value to the Northwest	The IDL network works collaboratively to identify, test and evaluate energy efficiency solutions for the built environment. Together, their work: • Explores and tests solutions—such as grid-interactive efficient buildings—to address rapidly emerging challenges specific to each micro-region, feeding the emerging technology pipeline. • Supports equitable delivery of energy efficiency solutions by supplying localized context and insights to improve relevance and efficacy of interventions. • Influences new construction and renovation projects to cost-effectively achieve compliance with emerging policies (e.g., Building Performance Standards) and serve as a model for future buildings and practices. • Quantifies and verifies energy savings and non-energy benefits—such as Green House Gas reductions—resulting from new technologies and practices. • Results in advanced tools, methods and technologies to accelerate energy-efficient buildings through research and project-based education. • Delivers educational programs and experiences that form the next generation of leaders in the building industry. • Creates leads and opportunities at very early phases of project development, when efficiency can most effectively be influenced.

Appendix B: 2025-2029 Scorecard

Market Transformation Metrics		Business Plan Estimate
Electric Portfolio	5-year (2025–2029) Co-Created Energy Savings	190–225 aMW
	10-year (2025–2034) Co-Created Energy Savings	365–470 aMW
	5-year Carbon Reduction (thousand tons)	780–900
	5-year Winter Peak Load Savings[8] (MW)	390–475
	5-year Summer Peak Load Savings[9] (MW)	340–400
Natural Gas Portfolio	5-year (2025–2029) Co-Created Energy Savings	6–17 MM Therms
	10-year (2025–2034) Co-Created Energy Savings	10–51 MM Therms
	5-year Carbon Reduction (thousand tons)	70–200

Operational Metrics		2025 Target
Electric Portfolio	2025 Budget ($ Millions)	38.7
	Administrative Budget (% total)	<18%
	20-year Portfolio Benefit-Cost Ratio	≥1
Natural Gas Portfolio	2025 Budget ($ Millions)	5.9
	20-year Portfolio Benefit-Cost Ratio	≥1
Employee Engagement		At industry benchmark or above

[8] Based on winter peak hours, 6:00 p.m. weekdays in December, January and February.
[9] Based on summer peak hours, 6:00 p.m. weekdays in July and August.

Appendix C: 2025 Emerging Technology Activities by Product

This chart lists the products and activities NEEA staff are planning for 2025 to understand and advance emerging technologies. Actual activities will vary based on opportunities, coordination with other researchers, and available resources. A short definition for each activity is listed after the chart.

PRODUCT GROUP	PRODUCTS	TECHNICAL POTENTIAL ASSESSMENT	TEST METHOD DEVELOPMENT	PERFORMANCE SPECIFICATION DEVELOPMENT	MANUFACTURER ENGAGEMENT	MARKET MONITORING	LAB TESTING	FIELD TESTING
BUILDING ENVELOPE	Dynamic Glazing					X		
	Envelope Sealing				X	X		
	High Performance Windows				X	X		
	Integrated Design					X		
	Integrated Envelope Performance Metric					X		
	Net-Zero Modular Home Construction				X			X
	Performance Path Code					X		
	Secondary Windows				X	X		X
	Vacuum Insulated Retrofit Wall System				X	X		X
	Vacuum Insulated Windows				X			
	Window Attachments				X	X		
CONSUMER PRODUCTS	All-In-One Washer w/Heat Pump Dryers*	X	X		X	X	X	
	Clothes Dryer Innovations (UV, Ultrasonic, others)					X		
	Commercial Clothes Washers					X		
	Commercial Cooking					X		
	Commercial Heat Pump Dryers (Electric)		X	X	X	X		
	Commercial Heat Pump Dryers (Gas)				X		X	

PRODUCT GROUP	PRODUCTS	TECHNICAL POTENTIAL ASSESSMENT	TEST METHOD DEVELOPMENT	PERFORMANCE SPECIFICATION DEVELOPMENT	MANUFACTURER ENGAGEMENT	MARKET MONITORING	LAB TESTING	FIELD TESTING
HVAC	Consumer Preference Shift Research for EE, Carbon, etc.					X		
	Displays/Monitors*		X	X	X	X	X	
	Induction Cooktops*	X			X	X		
	Laundry Centers w/Heat Pump Dryers*		X		X	X	X	
	NEEA Dryer Test Procedure*		X		X		X	
	Residential Clothes Washer Technology Assessment*					X		
	Smart Home Energy Management				X	X		
	Thermo-electric HP Dishwasher*				X			
	UHD Televisions*		X	X	X	X	X	
	Advanced Residential Duct Sealing*	X			X	X		X
	Air Quality Monitoring and HVAC control					X		
	Alternative refrigerants				X	X		
	Cold Climate Heat Pump*			X	X	X	X	
	Combination Space and Water Heating (Combi)/Tri-Mode Heat Pumps				X	X	X	
	Dual Fuel/Hybrid Heating Systems (Gas/Electric)	X	X	X	X	X	X	X
	Efficient Roof Top Units*		X	X	X	X		
	Energy and Heat Recovery Ventilation*				X	X		
	Gas Heat Pump*				X	X	X	
	High Efficiency Dedicated Outdoor Air Systems*			X	X	X		X

PRODUCT GROUP	PRODUCTS	TECHNICAL POTENTIAL ASSESSMENT	TEST METHOD DEVELOPMENT	PERFORMANCE SPECIFICATION DEVELOPMENT	MANUFACTURER ENGAGEMENT	MARKET MONITORING	LAB TESTING	FIELD TESTING
LIGHTING	Inverter driven Packaged Terminal Heat Pumps (PTHP)					X		
	Line Voltage Thermostats				X	X		
	Low Load Efficiency Residential Heat Pumps*	X			X	X	X	X
	Multi-head System Analysis	X			X	X		
	Optimized Residential Dual Fuel HVAC Controls				X			X
	Radiant Heating/Cooling				X	X		
	Residential Heat pump commissioning products*				X	X		
	Residential Heat Pump Advanced Features *				X	X		
	Residential HP minimize Auxiliary Heat*				X			
	Residential HVAC OpenADR & CTA-2045 Capabilities Development				X	X		
	Room Heat Pumps*	X			X	X		X
	Variable Speed Heat Pump*		X	X	X		X	X
	Exterior LLLC with integrated Storage*	X			X	X	X	X
	Intelligent Buildings					X		
	LED UV Lighting Applications					X		
	Luminaire Level Lighting with Integrated HVAC Control*				X	X		X
	Network Lighting Controls				X	X		
	Outdoor Lighting Controls*	X			X	X	X	X
	Residential Lighting Controls				X	X		
	Whole Building AI Control				X	X		

PRODUCT GROUP	PRODUCTS	TECHNICAL POTENTIAL ASSESSMENT	TEST METHOD DEVELOPMENT	PERFORMANCE SPECIFICATION DEVELOPMENT	MANUFACTURER ENGAGEMENT	MARKET MONITORING	LAB TESTING	FIELD TESTING
MOTORS DRIVEN SYSTEMS	Advanced Motor Technology Assessment			X	X	X		
	Air Compressor Opportunity Assessment					X		
	Back-Up Generator HP Heater Testing and Validation				X			
	Efficient Fan Testing*	X	X	X	X		X	
	Extended Motor Products (Pumps) Additional Market Opportunities*		X	X	X	X		
	Fan Array Analysis				X	X		
	Power Drive Systems Power Index	X	X	X		X		
WATER HEATING	Heat Pump Water Heaters for challenging installs*			X	X			X
	Industrial Heat Pump Market Inventory					X		
	DR Enabled Water Heaters*		X	X	X			
	Mixing/Tempering Valve Performance Testing*				X		X	
	Split System Water Heaters					X		
	HPWHs Mid / Large-scale Multi-family			X	X	X		X
	Low-rise multi-family water heating			X	X		X	X
	Commercial HPWH Water Heaters			X	X	X		X
	Central HPWH				X	X		X
	Hybrid (dual fuel) Water Heaters				X	X		

PRODUCT GROUP	PRODUCTS	TECHNICAL POTENTIAL ASSESSMENT	TEST METHOD DEVELOPMENT	PERFORMANCE SPECIFICATION DEVELOPMENT	MANUFACTURER ENGAGEMENT	MARKET MONITORING	LAB TESTING	FIELD TESTING
	Faucets and Shower Heads					X		
	Drain Water Heat Recovery				X	X		
	Commercial Gas Heat Pump Water Heating (GHPWH)	X			X	X	X	X
	Water Loop Designs					X		

**Denotes work that directly supports an existing NEEA program.*

Definitions:

Technical Potential Assessment: Estimate of technical energy savings potential of a product given its in-the-field energy savings and the number of locations where it could be installed.
Test Method Development: Test methods are used to distinguish the performance of one product from another. A good method is repeatable, reproduceable, reasonably priced, and approximates real world operating conditions (representative).
Performance Specification Development: Once a test method is available, the performance of efficient products can be compared to market average (or Federal standard) products. A performance specification and certification can be added making it easier for the market to identify the efficient product (e.g., ENERGY STAR).
Manufacturer Engagement: Connecting with manufacturers and sharing the value of energy efficiency encourages manufacturers to consider energy efficiency during product development. Manufacturers provide important information on technology limitations and other constraints that may slow or stall product commercialization.
Market Monitoring: Tracking market trends and structure helps identify opportunities and barriers for new efficient products and often provides clues when strategic interventions in the market would be most effective.
Lab Testing: Used to understand energy efficiency and operation of products in a controlled environment. Enables isolation of innovations to better understand their impact on energy efficiency and product performance. When a standardized test method is used, enables comparison with other products.
Field Testing: Used to establish and validate savings in real world situations.

Appendix D: 2025 Market Research and Evaluation Calendar

PRODUCT GROUP	DELIVERABLE NAME	DURATION OF RESEARCH	END DATE
BUILDING ENVELOPE	(NO BLDG ENVELOPE RESEARCH IN 2025)		
CODES AND STANDARDS	Washington & Montana Residential Code Savings Assumptions Review	November 2024 – March 2025	April 2025
	Portable ACs Standard Evaluation	November 2025 – April 2025	May 2025
	Air Compressors Standard Evaluation	November 2025 – April 2025	May 2025
	Idaho Commercial New Construction Code Compliance Evaluation	August 2023 – March 2025	June 2025
	Oregon Residential Code Compliance Evaluation	November 2023 – May 2025	June 2025
	Residential and Commercial Codes MPER #6	October 2024 – April 2025	June 2025
	Codes Savings Baseline and Assumptions Review	October 2024 – May 2025	June 2025
	General Purpose Motors/ESEM Standards Evaluation	July 2025 – November 2025	December 2025
	Oregon & Washington Residential Code Compliance Evaluations	October 2025 – November 2026	December 2026
CONSUMER PRODUCTS	TVs Planning Assumptions Review	January 2025 – May 2025	June 2025
	TVs Voluntary Agreement Influence Assessment & Baseline Review	April 2025 – September 2025	October 2025
	Retail Product Portfolio MPER #3	December 2024 – October 2025	November 2025
	Dryers ENERGY STAR Specification Influence Assessment and Baseline Review	June 2025 – November 2025	December 2025
HVAC	Efficient Rooftop Unit MPER #1	June 2023 – April 2025	May 2025
	High Performance HVAC MPER #1	June 2023 – April 2025	May 2025
	Efficient Rooftop Unit MPER #2	August 2025 – May 2026	June 2026
	High Performance HVAC MPER #2	August 2025 – May 2026	June 2026

PRODUCT GROUP	DELIVERABLE NAME	DURATION OF RESEARCH	END DATE
	Commercial HVAC Key Assumptions Review	October 2025 – March 2026	April 2026
	Gas HE DOAS/Fuel-Neutral ERTU Market Research	January 2025 – September 2025	October 2025
	Ductless Heat Pumps Long-Term Monitoring & Tracking, Year 3	October 2024 – April 2025	May 2025
	Advanced Heat Pumps Baseline Reviews	January 2025 – June 2025	July 2025
	Advanced Heat Pumps MPER #1	July 2025 – July 2026	August 2026
LIGHTING	Luminaire Level Lighting Controls MPER #3	September 2024 – May 2025	June 2025
MOTOR DRIVEN SYSTEMS	Agricultural Pumps Market Research	November 2024 – May 2025	June 2025
	Stand-Alone Fan Manufacturer Rep & Specifier Market Activity Research	November 2024 – June 2025	August 2025
	Efficient Fans Baseline Forecast Review	November 2025 – January 2026	February 2026
	Extended Motor Products MPER #2	July 2025 – April 2026	May 2026
	Motor-Driven Systems Industrial Market Research	July 2025 – May 2026	June 2026
NEW CONSTRUCTION	Manufactured Homes Benefit-Cost Model Review	June 2025 – August 2025	September 2025
	Manufactured Homes, Long-Term Monitoring & Tracking, Year 1	October 2025 – March 2026	April 2026
WATER HEATING	2024 Heat Pump Water Heater Cost Benefit Model Review	November 2024 – March 2025	March 2025
	Heat Pump Water Heater MPER #8	October 2024 – June 2024	August 2025

Appendix E: NEEA 2025 Marketing Calendar

Legend	
Upstream and mid-stream marketing activity	
Downstream marketing activity per RPAC definition	

HVAC MARKETING OVERVIEW

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ADVANCED HEAT PUMPS												
Develop and heat pump improvement messaging to increase understanding of value proposition with target audiences	*Ongoing*											
Create marketing resources and disseminate them through BetterBuiltNW, industry partners, and trade organizations	*Ongoing*											
EFFICIENT ROOFTOP UNITS (Efficient RTU, GAS)												
Develop messaging map to inform targeted marketing communications and product positioning	*Ongoing*											
Develop new marketing materials to create additional awareness and highlight the features of these units	*Ongoing*											
HIGH-PERFORMANCE HVAC												
Review and refine messaging for market-facing marketing content	*Ongoing*											
Develop and promote case studies to educate the target audience about VHE-DOAS' energy savings and non-energy benefits	*Ongoing*											

LIGHTING MARKETING OVERVIEW

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
LUMINAIRE LEVEL LIGHTING CONTROLS (LLLC)												
Develop case studies and success stories to increase decision-maker understanding and acceptance of LLLC's business value	*Ongoing*											
Target influential industry organizations with training and resources reinforcing LLLCs' relevance for lighting professionals (designers, specifiers, and installers) and their clients	*Ongoing*											
Support development and promotion of LLLC webinars, industry events, and speaking opportunities throughout the region	*Targeted events and as opportunities arise*											

MOTORS MARKETING OVERVIEW

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
EFFICIENT FANS												
Develop and disseminate educational marketing materials to raise awareness of the value of efficient pump products	*Ongoing*											
Develop and publish marketing content (e.g., case studies or BetterBricks Industry Voices Q&As) featuring early adopters and/or successful Smart Pump installations	*Ongoing*											
Support industry organizations' marketing efforts	*Targeted events and as opportunities arise*											
EXTENDED MOTOR PRODUCTS (XMP)												

Develop and publish marketing content (e.g., case studies or BetterBricks Industry Voices Q&As) to drive market education and awareness, focusing on the value of the informational labels and non-energy benefits	*Ongoing*
Produce marketing content to support distributor trainings and industry organizations' educational programming	*Targeted events and as opportunities arise*

WATER HEATING MARKETING OVERVIEW

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ADVANCED COMMERCIAL GAS WATER HEATING (ACGWH)												
Support bringing new gas heat pump water heater product to market by offering strategic marketing consultation	*Ongoing*											
HEAT PUMP WATER HEATERS (HPWH)												
Provide ongoing marketing support to targeted distributors and installers (e.g., trainings, marketing content, incentive programs)	*Ongoing*											
Review, update, and expand technical assets on HotWaterSolutionsNW.org to support region-wide understanding of HPWHs and installation best practices	*Ongoing*											
Optimize the Hot Water Solutions email marketing channel in support of distributor and installer education	*Monthly newsletter distribution*											
Develop and run a consumer marketing campaign focused on increasing awareness and demand in areas with historically low adoption												

ENABLING INFRASTRUCTURE MARKETING OVERVIEW

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BETTERBRICKS – COMMERCIAL												
Finalize and launch the rebuilt BetterBricks.com	*Q1 and Q2 2025*											
Develop and deploy a targeted paid media campaign to reach additional commercial building decision-makers and drive qualified traffic to BetterBricks.com	*Q2 to Q3 2025*											
Optimize the BetterBricks email marketing channel to drive increased understanding of the benefits of energy-efficient building upgrades	*Monthly newsletter distribution*											
Refine audience-centric value propositions and messaging tools to strengthen brand awareness and perception	*Ongoing*											
Support trade industry partnerships and conference sponsorships	*Targeted events and as opportunities arise*											
Support training and educational efforts with partners (e.g., Integrated Design Labs, BOMA chapters, New Buildings Institute) to promote whole-building efficiency solutions	*Ongoing*											
BETTERBUILTNW – RESIDENTIAL NEW CONSTRUCTION												
Update BetterBuiltNW.com with new marketing content (e.g., case studies, reports, events, and resources)	*Ongoing*											
Plan BetterBuiltNW website redesign to improve access to resources among target audiences (site to relaunch in 2026)	*Ongoing*											
Optimize the BetterBuiltNW email marketing channel to better educate new construction professionals on the value of building above code	*Monthly newsletter distribution*											

Appendix F: Value Metrics by Program for Cycle 7 (2025-2029)

The table below is for the programs that are represented directly in this operations plan, not a full accounting for the portfolio[10]. NEEA will utilize funding in Cycle 7 to advance new technologies and develop new market transformation programs, as well as new state code and federal and state product standards for the region. These new opportunities will be added to this appendix as they are developed.

	Technical Achievable Potential[11] (aMW or Therms)	2025-2029 Co-Created Savings[12] Forecast (aMW or Therms)	2025-2034 Co-Created Savings Forecast (aMW or Therms)	Benefit-Cost Ratio	Winter Peak Factor[13] (MW/aMW)	Summer Peak Factor (MW/aMW)	2025-2029 Co-Created Avoided Emissions[14] (tons CO2e)
Consumer Products							
Retail Product Portfolio	*350*	*20-40*	*33-83*	*2.5*	*1.6*	*1.7*	*80,000-160,000*
Water Heating							
Heat Pump Water Heaters	*260*	*25-35*	*148-220*	*1.6*	*1.8*	*2.1*	*100,000-140,000*
Advanced Commercial Gas Water Heating	*TBD*	*TBD*	*TBD*	*TBD*	*N/A*	*N/A*	*TBD*
HVAC							
High Performance HVAC	*30*	*0-1*	*3-7*	*2.0*	*2.4*	*0.6*	*0-4,000*
Efficient Rooftop Units (Gas)	*3 MM Therms*	*0.1-1.0MM Therms*	*0.5-2MM Therms*	*1.2*	*N/A*	*N/A*	*500-6,600*
Advanced Heat Pumps	*70*	*TBD*	*TBD*	*>1*	*2.6*	*2.9*	*TBD*
Lighting							
Luminaire Level Lighting Controls	*55*	*4-12*	*24-32*	*1.1*	*1.6*	*1.3*	*16,000-48,000*
Motors							
XMP-Pumps	*100*	*4-9*	*8-19*	*1.2*	*1.9*	*0.9*	*16,000-36,000*
Efficient Fans	*145*	*TBD*	*TBD*	*TBD*	*TBD*	*TBD*	*TBD*
New Building Codes							
Residential New Construction	*N/A*	*64-120*	*88-164*	*N/A*	*2.6*	*1.7*	*260,000-485,000*
Residential New Construction (Gas)	*N/A*	*3-11MM Therms*	*3-21MM Therms*	*N/A*	*N/A*	*N/A*	*20,000-73,000*
Commercial New Construction	*N/A*	*47-63*	*112-150*	*N/A*	*2.3*	*1.6*	*190,000-250,000*
Commercial New Construction (Gas)	*N/A*	*0.9-1.3MM Therms*	*1-10MM Therms*	*N/A*	*N/A*	*N/A*	*6,000-8,500*

[10] Tracking against the value metric forecasts included with the 2025-2029 Business Plan will be done via quarterly scorecard reporting as NEEA progresses through the 2025-2029 funding cycle.

[11] **Technical Achievable Potential** is the amount of energy use that efficiency can realistically be expected to displace assuming the most aggressive program scenario possible (e.g., providing end-users with payments for the entire incremental cost of more efficiency equipment). This is often referred to as maximum achievable potential. Achievable potential considers real-world barriers to convincing end-users to adopt efficiency measures, the non-measure costs of delivering programs (for administration, marketing, tracking systems, monitoring and evaluation, etc.), and the capability of programs and administrators to ramp up program activity over time

[12] **Co-Created Savings** are all energy savings above baseline that occur in the market due to the combined efforts of utilities, NEEA and other actors.

[13] **Peak Factor** is a representation of the amount of peak savings for each average megawatt of efficiency achieved by that program. This will be used as one portfolio metric in the 2025-2029 cycle.

[14] **Avoid Emissions** are the tons of carbon-dioxide equivalent that are not added to the atmosphere due to the impacts of efficiency.