

# Exhibit 5, Supplement 1

NEEA Planned Activities Report





## 2022-2023 Planned Activities Report Prepared for Puget Sound Energy

### OVERVIEW

***NOTE: NEEA is currently undergoing 2022 operations planning. NEEA staff will present a final plan to the NEEA Board of Directors for approval on December 3, 2021. If the final draft of the 2022 Operations Plan necessitates changes to NEEA's 2022-2023 planned activities, NEEA staff will update this report accordingly.***

The Northwest Energy Efficiency Alliance (NEEA or the alliance) is an alliance of more than 140 Northwest utilities and energy efficiency organizations working on behalf of Northwest energy consumers. The alliance aggregates and leverages the power of the region to identify and vet emerging technologies, and then creates the market conditions necessary for them to take hold. The alliance also helps the region capture energy savings through progressively efficient codes and standards. Puget Sound Energy has been a member of the alliance since 1997.

This report summarizes NEEA's 2022-2023 planned activities within each of its primary Business Plan strategies: Emerging Technology, Effective Portfolio Execution, Codes and Standards, Market Intelligence, and Convening and Collaborating with the region.

### PRIMARY BUSINESS PLAN STRATEGY: EMERGING TECHNOLOGY

NEEA builds and maintains a regional pipeline of emerging or expanding energy-efficient products and manages those opportunities through the Initiative Lifecycle process. Emerging Technology activities include: 1) scanning for new technologies that help manage portfolio risk and support Business Plan goals; 2) developing those technologies into products or measures that meet the region's goals; and 3) tracking regional emerging technology activities and gaps in coordination with the Regional Emerging Technology Advisory Committee (RETAC)<sup>1</sup>.

Using NEEA's scanning process, NEEA staff has identified a broad list of promising emerging technologies, services or practices that the alliance will investigate in 2022-2023, with an emphasis on HVAC and water heating. Highlights from that list are included below. More information is provided in NEEA's Emerging Technology Quarterly Newsletter, which can be found on [neea.org](http://neea.org):

- **HVAC Product Group:** The alliance is investigating several emerging HVAC technologies, such as high efficiency dedicated outdoor air systems (HE-DOAS), heat pumps, HVAC controls, and thermostats. Key activities will include demonstrating the use and energy-savings potential of HE-DOAS, which use a high-efficiency natural gas system such as a condensing boiler or natural gas heat pump. This expands upon the alliance's work on Very High Efficiency Dedicated Outdoor Air Systems (VHE-DOAS).

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<sup>1</sup> RETAC advises NEEA's Executive Director on the alliance's work toward achieving strategic pipeline goals and helps track and coordinate the progression of energy efficiency technologies to improve technology readiness and market adoption in the Northwest.

- **Water Heating Product Group:** The alliance will continue to investigate several emerging technologies in the Water Heating Product Group with a focus on electric and natural gas products in residential, commercial and multi-family applications. Key activities will focus on split-system heat pump water heaters, which separate the heat pump from the water tank, offering an alternative installation solution, gas heat pump water heaters and combination hot water heater and space heating systems (combi systems). The alliance will work to develop performance specifications and begin lab and field testing of both gas and electric products to demonstrate the performance and adaptability of heat pump-based space and domestic water heating systems in existing homes and small commercial applications.
- **Build Envelope Product Group:** Building envelope technologies that the alliance is investigating include window attachments, non-glass secondary windows, and thin triple windows. Key 2022-2023 activities will focus on performance specification development, manufacturer engagement, market monitoring and field testing.
- **Motor-Driven Products Product Group:** The alliance will continue to investigate emerging motor-driven technologies, including pumps, power drive systems and fans. Planned activities will focus on conducting technical potential assessments, improving test methods, and establishing relationships with key market partners. These efforts may include continued sponsorship with the Air Movement and Control Association (AMCA), understanding the Fans Energy Index (FEI) label, defining program needs, designing incentive structures, and additional ad hoc fans research (if needed).
- **Consumer Products Product Group:** In the consumer products market, the alliance is investigating several emerging technologies including thermo electric heat pump dishwashers, induction cooktops, and clothes dryer innovations such as UV and ultrasonic technologies. Top-loading clothes washers will continue to be part of the Retail Product Portfolio (RPP) program. Key activities will include leveraging efforts to better measure the real-world water and energy use of clothes washers to support updates to federal test methods and the ENERGY STAR<sup>®</sup> specification.

## PRIMARY BUSINESS PLAN STRATEGY: EFFECTIVE PORTFOLIO EXECUTION (ELECTRIC)

In 2022-2023, NEEA staff will continue managing the portfolio of Market Transformation programs in seven cross-sector Product Groups: Building Envelope, Consumer Products, HVAC, Lighting, Motor-Driven Products, New Construction, and Water Heating. Each Product Group includes multiple programs and emerging technologies that share supply chain opportunities. This approach allows the alliance to leverage shared relationships and market channels among programs and to deliver efficiencies for both NEEA and its supply chain partners.

### *Building Envelope Product Group*

NEEA's Building Envelope Product Group includes the supply chain that manufactures, distributes and sells the physical separators between the interior and exterior of a building, as well as the end consumers who purchase them. These physical separators include walls, fenestration and roofs.

There are currently two programs in the Building Envelope Product Group: Window Attachments program and the newly added Thin Triple Windows program.

- **Thin Triple Windows (TTW):** Thin triple windows are primary windows with three panes of glass: two of standard thickness and a third thin center pane. The TTW program aims to accelerate the adoption of these high performing windows by increasing builder demand, influencing leading manufacturers to scale production and advancing the ENERGY STAR criteria. The alliance will leverage national interest and funding (including the DOE's support for the Partnership for advanced Window Solutions, or PAWS) to engage manufacturers and scale the TTW program into the market. Key program activities in 2022-2023 include completing a Northwest windows market characterization study, conducting additional demonstrations of TTW replacements, engaging with ENERGY STAR to push for a tiered specification change, and working with national partners to create scale with window manufacturers.
- **Window Attachments:** This program works to accelerate the adoption of high-performance window attachment products in existing buildings. The program is currently focused on secondary windows in the commercial market. These transparent panes and frames that attach to an existing window (on the inside or outside) are sometimes referred to as storm windows, secondary glazing systems, or window inserts. During the 2022-2023 timeframe, the program will continue only the most critical activities to prioritize other fast-developing opportunities in the regional portfolio, including TTW. All other activities will be scaled back and/ or delayed. Critical work in-progress includes a field test, which serves to validate energy savings estimates, increase understanding of product and installation costs, and refine understanding of program barriers and the customer decision-making process. The program will also maintain manufacturer engagement and sales data collection, minimal technical and marketing support for ad hoc projects, and engagement with Attachments Energy Rating Council (AERC) to support growth of the Commercial Products Certification program that launched in 2020.

## **Consumer Products Product Group**

NEEA's Consumer Products Product Group comprises the entire supply chain that delivers consumer goods and services in high volume. This includes manufacturers, distributors, physical and online retailers, contractors, installers, as well as end consumers. Retail Product Portfolio is currently the sole program in the Consumer Products Product Group.

- **Retail Product Portfolio (RPP):** The RPP program provides midstream incentives on qualified energy-efficient products by coordinating closely with the Environmental Protection Agency's ENERGY STAR Retail Products Platform (ESRPP) and with corporate-level buying teams of national retailers. These incentives are intended to: 1) influence retail buying and stocking decisions so that consumers will have a wider variety of efficient choices; and 2) drive market share to help the program further influence manufacturer product offerings, and product standards and specifications. In 2021, NEEA staff took a more active role in the facilitation of national ESRPP efforts to support the evolution of the program and give program sponsors more control. In 2022-2023, the program will focus on growing and strengthening ESRPP through targeted recruitment and retention activities, and continuing to work closely with—and in some cases implementing—ESRPP programs to maximize influence on manufacturing decisions for

each product in the portfolio. Additionally, NEEA staff will focus on implementing product-specific strategies, including evaluating new products for inclusion in the portfolio, engaging retailers and program sponsors in program management and strategy, increasing the value delivered from sales data and supporting cost-effective data resourcing for the alliance and all ESRPP program sponsors.

## ***HVAC Product Group***

NEEA's HVAC Product Group works with 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: Efficient Roof Top Units (ERTU; see Natural Gas section), High-Performance HVAC and VSHP. Planned 2022-2023 activities include:

- **High-Performance HVAC:** The High-Performance HVAC program aims to transform the commercial HVAC market in the Northwest by accelerating the adoption of high efficiency HVAC systems and components, resulting in substantial energy and non-energy benefits throughout the region. The program is focusing on Very High Efficiency Dedicated Outdoor Air Systems (VHE DOAS) in the commercial sector. VHE DOAS enables substantially higher energy savings above conventional DOAS configurations by pairing a very high efficiency heat recovery ventilator/ energy recovery ventilator (HRV/ ERV) with a high efficiency heating and cooling system, along with key design principles. The program will focus on: 1) engaging up to three multi-actor, supply side teams to identify, design and install VHE DOAS projects to inform market intervention development; 2) acquiring access to data needed to support market adoption tracking; and 3) finalizing key intervention strategies to advance the program to Market Development.
- **Variable Speed Heat Pump (VSHP):** VSHPs have variable-speed compressors that operate in a broader temperature range than traditional single-speed heat pumps. The VSHP program aims to improve best practices and efficiency for electric residential heating system replacements and focuses on replacement of electric forced air furnaces and air source heat pumps, which account for roughly one in five homes in the Northwest. In 2022-2023, the program will focus on these initial VSHP products and finding applications for quick advancement into the market by prioritizing products that meet energy and performance specifications for cold climate and low price point systems. The program team will also collaborate with supply chain, alliance funders and other strategic partners to finalize program intervention strategies.

## ***Lighting Product Group***

NEEA's Lighting Product Group works with the supply chain that manufactures, distributes, specifies, designs and installs lighting products, as well as the end consumers who purchase them. Specific lighting products include lamps, ballasts, controls and fixtures. Luminaire Level Lighting Controls (LLLC) is currently the sole program in the Lighting Products Group. 2022-2023 planned activities include:

- **Luminaire Level Lighting Controls (LLLC):** This program uses a multi-faceted approach to transform the market for LLLC, incorporating specification development, market awareness

building, training, utility program support, supply chain interventions, and integration with energy codes. Program activities will target new construction, major renovation and lighting retrofits with a focus on: 1) building awareness with early adopters; 2) integrating LLLCs with energy codes; 3) building upon foundational educational efforts for installers, lighting designers and specifiers to focus on more targeted education designed to remove specific supply chain sales and installation barriers; 4) engaging key influencers in the supply chain and sales channels to create effective LLLC champions; and 5) leveraging new commercial policy mandates, such as the Washington Clean Buildings bill, to position LLLCs as a key strategy for building owners to meet carbon goals.

### ***Motor-Driven Products Product Group***

The Motor-Driven Products Product Group includes the supply chain that manufactures, distributes, specifies, designs and installs a variety of motor-driven systems such as pumps, fans, compressed air systems and high-performance motors, as well as the decision-makers who influence the purchase of these products. The only program currently in this Product Group is Extended Motor Products (XMP) - Pumps. However, the alliance expects to advance a stand-alone commercial and industrial (C&I) fans opportunity into the portfolio in 2022 to capture readily available efficiency opportunities. 2022-2023 planned activities include:

- **Extended Motor Products – Pumps (XMP):** This program works to accelerate the adoption of highly efficient motor-driven products, which are defined as electric motor-driven systems with an active-end that convert electric power into mechanical power. XMP provides midstream incentives and other support to motivate pump and circulator distributors to preferentially stock and sell efficient pump products. In exchange, distributors supply NEEA with full-category sales data, which informs program strategy and enables market progress to be measured. XMP also partners with the Hydraulic Institute (HI) on its energy rating (ER) program to raise market awareness of the ER label and encourage product differentiation of efficient pumps and circulators. In 2021, the program conducted a pumps distributor pilot to better understand pump purchasing trends. The team also began scoping a research project to assess current awareness of the HI ER label and explore how best to position the label in the market; findings are expected in the second quarter of 2022. In 2022-2023, the team will focus on advancing the XMP program into the market using insights from these research assessments to inform program strategy going forward. Additionally, the alliance will continue to partner with industry groups to develop and promote the HI ER label, which clearly articulates the relative differences in energy performance between models.

### ***New Construction Product Group***

Working closely with the alliance's Codes and Standards team, the New Construction Product Group maximizes energy efficiency opportunities for new residential and commercial buildings by enabling code advancement through the market adoption of energy-efficient products and practices. Beginning in 2022, NEEA's Residential New Construction and Commercial Code Enhancement programs will no longer be stand-alone Market Transformation programs, but instead will be incorporated into the codes and standards activities. Consolidating the work under one team will enable more streamlined market engagement and a right-sized state-by-state approach, as well as

result in anticipated cost savings. Manufactured Homes will remain a stand-alone program. Planned 2022-2023 activities include:

- **Manufactured Homes:** This program works to increase voluntary adoption of NEEM+ manufactured homes, an advanced tier of energy-efficient manufactured homes that leverages ENERGY STAR's Northwest Energy Efficient Manufactured Housing (NEEM) program. The program's overall goal is to provide the Northwest with additional market evidence to support a new Federal Energy Conservation Standard for manufactured homes. The U.S. DOE is working to establish a new Housing and Urban Development (HUD) standard for manufactured homes, which is expected take effect sometime in 2023 and provides a significant opportunity for the program. If the federal standard is equivalent to NEEM 1.1, then NEEM+ will become the above-code option and new ENERGY STAR specification in the Northwest. Due to this pending update, activities are aimed at influencing the revision of the HUD manufactured home standard to meet the NEEM 1.1 specification and maintaining NEEM+ availability until a HUD standard and ENERGY STAR specification revision occur. The program will continue supporting the NEEM+ supply chain by providing technical support and training to manufacturers and sales tools to retailers. Additionally, the program will continue to explore low-cost coordination opportunities with retailers and utilities to increase consumer awareness, including providing retailers with the sales tools needed to communicate the value of NEEM+ to homebuyers.

### **Water Heating Product Group**

NEEA's Water Heating Product Group engages the supply chain that manufactures, distributes (wholesale and retail), specifies, designs and installs electric commercial and residential water heaters, as well as the end consumers who purchase them. There are two programs currently in the Water Heating Product Group, electric Heat Pump Water Heaters (HPWH) and Efficient Gas Water Heaters (EGWH). EGWHs are described in more detail in the Natural Gas Portfolio section of this document. Planned 2022-2023 activities for the HPWH program include:

- **Heat Pump Water Heaters (HPWH):** This program works to transform the water heating market by overcoming market adoption barriers through supply chain engagement, installation configuration solutions, policy advocacy and consumer awareness campaigns. In 2021, the U.S. DOE indicated it will begin a rule making process for water heating. In preparation for this rule making, the program will collaborate with the Advanced Water Heating Initiative (AWHI), key advocates, and ENERGY STAR to increase national awareness, disseminate training, and address two types of challenging installations (cold climate and space constrained). In addition, the program will continue to implement engagement plans with manufacturers and energy efficiency advocates to address market barriers. Finally, the program will also continue to engage with wholesalers and retailers in the Northwest to drive regional demand and encourage utilities without programs to support regional growth.

### **Infrastructure Programs**

Alliance Infrastructure programs develop and implement crosscutting enabling infrastructure that builds market capability, awareness and demand for energy-efficient products, services and practices or new customer engagement opportunities for funders. These programs support

existing and future Market Transformation programs, which each Product Group leverages. Enabling Infrastructure programs include BetterBricks and the Integrated Design Labs (IDLs), as well as one specially-funded project, Strategic Energy Management (SEM), of which Puget Sound Energy is a funder. Planned 2022-2023 activities include:

- **BetterBricks:** BetterBricks is a long-standing, trusted regional resource for building professionals that supports alliance programs by raising market awareness and capability for energy-efficient technologies and decision-making. BetterBricks' target audiences include building owners, property managers, building facilities staff, architects, designers, engineers and contractors. The program will assess and optimize market relationships and communications channels to better support alliance programs with awareness-building, education, training and market engagement. In addition, the alliance will explore opportunities to support energy efficiency in the Washington market in response to the Clean Buildings bill and encourage effective coordination by developing a market engagement roadmap to ensure persistent engagement opportunities in the commercial building market for current and future alliance programs.
- **Integrated Design Labs (IDLs):** The mission of the 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 several regional universities including Universities of Idaho, Oregon and Washington, and Montana and Washington State Universities. A critical partner to the alliance's programs, IDLs accelerate Market Transformation through research, technical assistance and education used by NEEA programs and market partners. The alliance helps to fund IDLs in two ways: 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 particular projects or work that is requested of the labs. Services funding supports the alliance's Emerging Technology and program work and is included in other Operations Plans and budgets.
- **Strategic Energy Management (SEM):** The SEM program aims to: 1) support Northwest program administrators with high-value SEM tools and resources to launch, grow and sustain regional SEM programs, 2) enable commercial and industrial customers to see value in SEM as a strategy for meeting sustainability and energy performance goals, 3) understand baseline SEM practices and identify targeted savings opportunities, and 4) build regional and national consensus on SEM as a best practice or de facto standard. The SEM program will continue to offer a holistic set of high-value tools and resources via the SEM Hub website, including the Tool Box Talk Cards NEEA staff developed in 2021 to engage SEM teams and provide information to pursue energy efficiency in commercial buildings, and will actively encourage collaboration among SEM practitioners. In addition, the program will convene the Northwest SEM Collaborative with a focus on the most pressing needs of funders. And, in addition to these existing resources, aggregating and analyzing data to inform programs will be an important new tool for identifying best practices and opportunities. Across these three areas of activity—SEM Hub, Northwest SEM Collaborative and Data Plan implementation—NEEA staff will focus SEM Infrastructure efforts based on funder priorities, as informed by a Workgroup made up of SEM program funders. Finally, the alliance will develop a plan to transition the collaborative and other SEM assets to regional and National stakeholders by 2025.

## PRIMARY BUSINESS PLAN STRATEGY: EFFECTIVE PORTFOLIO EXECUTION (NATURAL GAS)

In 2022-2023, NEEA will operate a portfolio of Natural Gas Market Transformation programs that includes two gas-only programs, Efficient Rooftop Units and Efficient Gas Water Heating, and one dual-fuel program, Thin Triple Windows (see Electric Portfolio Execution section). Planned 2022-2023 activities for the alliance's natural gas initiatives include:

- **Efficient Gas Water Heaters (EGWH):** The EGWH program works to develop the market for efficient gas water heating products and bring a gas heat pump water heater (GHPWH) to market. The ultimate goal is to influence the passage of a federal standard requiring residential gas storage water heaters greater than 35 gallons to have a Uniform Energy Factor (UEF) >1 by 2030. One major manufacturer is in the process of commercializing a GHPWH, with an estimated product launch in 2023. To bolster a successful launch of the GHPWH product, the program will focus on: 1) collaborating with the manufacturer and natural gas utilities across North America to finalize product design, demonstrate performance in cold climates and prime the market; 2) partnering with technology developers and manufacturers to accelerate testing and commercialization of additional GHPWH technologies; and 3) assessing and leveraging opportunities related to currently available efficient gas water heaters and/ or optimization of existing technology.
- **Efficient Rooftop Units (ERTU):** The ERTU program works to increase the efficiency of packaged RTUs through product differentiation and ultimately, federal standards. This product contains all the components necessary to provide conditioned air and expands upon the former Condensing Rooftop Unit (C-RTU) program by addressing opportunities for higher efficiency RTU replacement options. The program will work to create awareness among target markets to drive adoption, establish the program's measurability and increase the availability of qualifying products to support program advancement into the natural gas portfolio. The alliance will collaborate with Nicor Gas to increase extra-regional funding for ERTU and TTW programs. In subsequent years, focus will shift to manufacturer engagement, supporting utility program development and increasing minimum efficiency levels through federal standards. While the initial target of this program will be natural gas heated ERTUs, the program will explore expanding to dual-fuel opportunities that target both gas and electric heated ERTUs.

## PRIMARY BUSINESS PLAN STRATEGY: CODES AND STANDARDS

In 2022-2023, the alliance's codes and standards efforts will continue: 1) supporting regional stakeholders in code development, adoption, training and implementation; 2) engaging with energy efficiency organizations and entities that develop national model codes; and 3) supporting the development of energy conservation standards and test procedures to materially improve efficiency outcomes. Codes and Standards activities are closely coordinated with the alliance's Market Transformation programs.

Since 2020, codes and standards activities have accelerated significantly in the region compared to

previous years due to federal and state decarbonization goals and other factors. NEEA staff are seeing increased codes and standards activity for products and measures that are less mature and have less market uptake. To adapt to these changes, the alliance is changing its approach to code and standards support in 2022-2023 by:

1. **Increasing market support for new code implementation:** NEEA has long provided training and resources to help building officials and builders navigate changes to energy codes in each state; planned activities will include additional training and resources for technologies that have limited voluntary market adoption. The Codes and Standards team will coordinate with product managers to research emerging technologies that are being included in code to identify barriers that need attention. Finally, market research will help identify how technologies are being adopted by builders.
2. **Increasing planning and coordination for codes and standards:** State energy codes are updated on predictable intervals and are responsive to state policies and goals. The Codes and Standards team plans to use this information to anticipate what measures and changes will be considered in upcoming code changes and to identify proactive ways to support the development of implementable, successful codes.
3. **Consolidating new construction activities with other codes and standards activities:** The Residential New Construction and Commercial Code Enhancement programs will no longer be stand-alone Market Transformation programs starting in 2022-2023, but instead will be incorporated into the codes and standards activities.

Planned 2022-2023 activities for Codes and Standards include:

- Supporting the residential code development in Washington.
- Supporting the International Energy Conservation Code Residential and Commercial development and the development of an updated ASHRAE 90.1.
- Updating code roadmaps (measure strategies) for commercial and residential buildings to support long term planning for codes in Washington.
- Encouraging adoption of roadmap measures and practices in the voluntary market, including base support for Performance Path tools and resources.
- Exploring code opportunities for existing buildings.
- Collecting data and other market evidence (e.g., market research, hot line questions, training feedback, etc.) to inform code proposals and changes to strategy.
- Supporting the development of new test methods for VSHPs and RTUs.
- Participating in the U.S. DOE's Energy Equipment Standards Test Procedures rulemaking processes.
- Collaborating with NEEA's programs and support groups to increase their understanding of codes and standards and how each group can align on data collection, analysis and support for the public code and standards process.

## **PRIMARY BUSINESS PLAN STRATEGY: MARKET INTELLIGENCE**

Market Intelligence activities are conducted by the Market Research and Evaluation (MRE), Data, Planning and Analytics (DPA) and Energy-use Studies (EUS) teams. Together, these teams comprise NEEA's Analytics, Research and Evaluation (ARE) Division. In 2022-2023, this division will focus on building capacity for in-house data management and analysis, continuing to grow quality data sets and insights to share with regional partners, and bringing more visibility to Market Transformation outcomes and market progress indicators in addition to energy savings.

### ***Market Research and Evaluation (MRE)***

MRE provides actionable insights for Market Transformation programs throughout their lifecycle and conducts formal evaluations of programs in Market Development and Long-Term Monitoring and Tracking. Planned 2022-2023 activities include:

- Completing more than 35 market research, evaluation or market characterization reports supporting both electric and natural gas programs.
- Continuing to identify, prioritize and close program knowledge gaps to support successful achievement of Market Transformation goals.
- Increasing focus on annual market progress evaluation processes, including tracking key outputs of Market Transformation and commercial/ residential codes program activities to inform a logic chain from program activity to market outcome.

### ***Data Planning and Analytics (DPA)***

The DPA team is responsible for cost-benefit analysis, energy savings forecasting and reporting, value metrics reporting, market analysis and data management. This group also maintains NEEA's centralized sales data hub. Planned 2022-2023 activities include:

- Providing analytical expertise responsible for forecasting and reporting on cost effectiveness, energy savings and other value metrics; leading data collection strategies and market and cost benefit analyses to support program milestones.
- Delivering market insights and trends to alliance programs and regional stakeholders to assist in their strategic decision-making; enabling data sharing across the region through the development of an open data catalog, which will provide an interactive web-based view of building stock, demographics, business types and other critical intel to inform Market Transformation strategies.
- Continuing to build in-house data management capabilities to ensure alliance data is secure, managed as a proprietary asset of the alliance, appropriately used, and cost-effectively developed and stored to allow for real-time access, flexibility and scalability as programs develop and needs evolve.

### ***Energy-use Studies (EUS)***

The EUS team develops, manages and analyzes large regional studies and associated data sets including those from the residential and commercial building stock assessments and the End-Use Load Research project (EULR). Planned 2022-2023 activities include:

**End-Use Load Research Project (EULR):** Initiated in 2017, the EULR project is funded by regional electric utilities and government agencies and is comprised of two studies - the Home Energy Metering Study (HEMS) and Commercial Energy Metering Study (CEMS).

- Installing circuit meters in 99 homes for the HEMS study with the goal of collecting clean, continuous circuit metered data at 1-minute intervals.
- Installing circuit meters in 60 office and retail buildings with the goal of collecting clean, continuous circuit metered data at 15-minute intervals.

**Residential Building Stock Assessment (RBSA):**

- Recruiting study participants and collect building characteristic and equipment data through on-site visits; targets are 1,000 detached single-family residences, 130 attached 1-4-unit residences, 230 5-unit plus multi-family buildings and 550 tenant units.
- Developing case weights that enable population-level estimates.
- Conducting regional and state-level summary and trend analysis of key characteristics for single-family and multi-family buildings and units; summaries will be compared to previous RBSA's to identify trends over time.

**Commercial Building Stock Assessment (CBSA):**

- Developing a draft of the CBSA project plan and data collection instrument, as well as evaluating and improving the virtual catalog in preparation for the planned 2023 Request for Proposal.

**PRIMARY BUSINESS PLAN STRATEGY: CONVENE AND COLLABORATE**

The Convene and Collaborate strategy is carried out by NEEA's Stakeholder Relations, Corporate Strategy and Corporate Communications Division. Corporate Communications oversees external communications and events and supports alignment on key internal strategic initiatives. Corporate Strategy is responsible for identifying and leading enterprise-wide planning initiatives, including NEEA's 5-year strategic and business plans as well as its annual operations planning process. Stakeholder Relations helps NEEA staff maintain high-functioning engagement practices with stakeholders to ensure effective collaboration and satisfaction with alliance activities.

In 2022, NEEA's Marketing function is moving into this Division to facilitate greater alignment between program marketing, corporate communication and evolving funder needs. The marketing team will work directly with program managers to support program marketing strategy, manage market-facing web properties, lead coordination with funders, and provide in-house consumer marketing expertise.

Key focus areas for the Division in 2022 are completing strategic planning, building the marketing team, helping staff contextualize industry and stakeholder insights, positioning NEEA within the evolving energy market and supporting successful execution of the DEI action plan.

### ***Additional Information***

More information on NEEA's Market Transformation programs, as well as NEEA's quarterly and annual reports, can be found at [neea.org](http://neea.org).

Questions or comments about this report? Please contact NEEA at: [info@neea.org](mailto:info@neea.org)