

2023 Q4 Market Progress Quarterly Report

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PRODUCTS

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- Water Heating Products
- Retail Products Portfolio
- Extended Motor Products
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- Efficient Fans
- Efficient Gas Water Heating

INTEGRATED SYSTEMS

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- Lighting Products
- Building Envelope
- High Performance HVAC
- Luminaire Level Lighting Controls
- High Performance Windows
- Efficient Rooftop Units
- Advanced Heat Pumps

NEW CONSTRUCTION

- New Construction
- Manufactured Homes



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Products

| Initiative Name | Manager | Fuel Type | Initiative Goal |
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| Consumer Products Product Group | Retail Products Portfolio (RPP) | Anne Brink | Electric | Leverage midstream incentives to influence retail stocking practices, ultimately driving manufacturing and standards for a portfolio of energy efficient products sold through the retail channel. | |
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| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Effectively implement product-specific strategies. | Document significant specification/standard progress related to four products by Q4. | Document significant specification/standard progress related to two products by Q4. | On target | NEEA provided comments to the Environmental Protection Agency's (EPA) Dryer Discussion Guide as a precursor to specification setting for a new ENERGY STAR dryer specification that will go into effect in 2024. NEEA was influential in advancing the television ENERGY STAR specification to version 9.1 which included the new Department of Energy (DOE) test procedure and more accurately reflects television energy usage and savings potential. NEEA was also influential in the Multi-product Agreement proposal that was submitted to DOE in September covering refrigerators, cooking products, clothes washers, clothes dryers and dishwashers. Signatories included the Association for Home Appliance Manufacturers (AHAM), the Appliance Standards Project (ASAP), NEEA and others. |
| | Explore alternative opportunities to promote efficient TVs. | Determine and implement TV strategy to increase participation in ENERGY STAR version 9.0 by end of Q2. | Determine and implement TV strategy to increase participation in ENERGY STAR version 9.0 by end of Q3. | Heads Up | 315 TV models have now been tested using the new test procedure supported by NEEA. 73 televisions (up from Q3) now qualify for ENERGY STAR version 9.1. Testing information indicates that at least one dominant operating system has reduced standby operating power to meet voluntary agreement levels. NEEA is using the test procedure data to inform recommendations for TV on-mode power levels to those manufacturers who signed the voluntary agreement. |
| Grow and strengthen ESRPP Program through targeted recruitment and retention activities. | Conduct outreach to four target program sponsors by Q4. | Conduct outreach to two target program sponsors by Q4. | On Target | The team worked with Dominion Virginia to begin to onboard them into the ESRPP program in January. With the addition of this utility, the ESRPP program will be reaching just over 24 percent of U.S. households. The program conducted outreach to NYSERDA, Hawaii, New Hampshire, and Pennsylvania in 2023. | |



Products

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| Motors Product Group | Extended Motor Products (XMP) | Warren Fish | Electric | Working midstream with distributors and manufacturers, drive awareness, stocking and sales of highly efficient pumps and circulators, and influence Federal standards over time. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Leverage relationships with pump manufacturers, distributors, and industry associations to benefit long term market transformation and accelerate the pace of smart pump and variable load pump sales growth. | Smart pumps market share of 20 percent or more and smart circulators market share of 15 percent or more. | Smart pumps market share of 15 percent or more and smart circulators market share of ten percent or more. | Heads up | Continued active participation by eight pump and circulator manufacturers' representative firms, with Smart Pump market share reaching 18 percent and Smart Circulator market share reaching 23 percent in Q4 2023. Although Q4 was slightly under target for Smart Pumps, the full-year 2023 results were strong for both Smart Pumps and Smart Circulators. |
| | Motivate participating manufacturers' representative firms to preferentially stock and to increase sales of highly efficient pumps and circulators. | Highly efficient market share of 25 percent or more. | Highly efficient market share of 15 percent or more. | On target | Highly efficient market share reached 29 percent in Q4 2023, slightly above the target of 25 percent. Participating representative firms influenced pump decision makers through Program Support Plan activities including hands-on trainings, webinars, lunch-and-learns and special events in Q4. |
| Raise awareness of energy efficient pumps, the Hydraulic Institute (HI) Energy Rating (ER) label, and the specific benefits of smart pumps related to installation and maintenance costs. | 400-plus contact hours with ump buyers/specifiers to educate about the ER label and HI's lifecycle cost calculator. | 300-plus contact hours with Northwest pump buyers/specifiers to educate about the ER label and HI's lifecycle cost calculator. | On target | In Q4, participating firms continued to offer in-person training events, and we exceeded our annual target with 577 total contact hours in 2024. | |



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| Motors Product Group | Efficient Fans | Tamara Anderson | Electric | Develop program to accelerate the adoption of efficient fans and fan system components. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Assess the landscape around codes and standards activities. | Develop codes and standards action Plan Q4 2022. | Develop codes and standards action plan Q1 2023. | Heads up | <p>The Efficient Fans team completed the Codes & Standards Action Plan by the threshold in Q1 2023, which documented the current landscape with various codes and standards related to Fan Energy Index and upcoming opportunities. The team updated the Codes & Standards Action Plan in Q4 2023.</p> <p>The first Federal Test Procedure on Fans and Blowers included Fan Energy Index as the energy efficiency metric, which was a huge win for the industry to build on the momentum and visibility of this metric. The Notice of Proposed Rulemaking (NOPR) for the standard for Fans and Blowers was released at the end of December 2023.</p> |
| Identify and scope initial manufacturers to partner with for program pilots. | Pilot partners confirmed by Q2 2023. | Pilot partners confirmed by Q4 2023. | Heads up | <p>The program is partnering with two major fan manufacturers and has collected fan sales data from those two manufacturers in Q3 of 2023. The program signed an agreement with one major fan manufacturer in Q3 2023 and was able to get historical data from another major manufacturer under a non-disclosure agreement (NDA) in Q3 of 2023. The program will be working with both manufacturers on updating their fan selection software to highlight Fan Energy Index, and to test targeted interventions to promote efficient fans.</p> <p>Work is in progress to update a short training video on "How do I select fan efficiency and fan regulations?" in eCAPS, Greenheck's fan selection software tool. We conducted two Fan Energy Index Symposium trainings, one in Portland and one in Seattle, in collaboration with BetterBricks and Twin City Fan in December.</p> | |



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| Motors Product Group | Efficient Fans | Tamara Anderson | Electric | Develop program to accelerate the adoption of efficient fans and fan system components. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Understand components of fan systems, and what drives fan efficiency. | Updated product plan in Q4 2023. | Updated product plan in Q1 2024. | Heads up | Due to resourcing constraints, the update of the Product Plan has been pushed into Q1 2024. Additional updates to the product plan will continue throughout 2024 as additional information is gathered by the program. |
| | Understand factors supporting and constraining the decision to purchase an efficient fan, including within manufacturers' selection software. | Market Characterization Report completed in Q4 2023. | Market Characterization Report completed in Q1 2024. | Heads up | The Market Characterization Study is on track, with preliminary results delivered to the team in early December. The report is expected to be complete in early January 2024 with the final report published on neea.org in early 2024. |



Products


| Initiative Name | Manager | Fuel Type | Initiative Goal |
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| Water Heating Product Group | Heat Pump Water Heaters (HPWHs) | Emily Rosenbloom | Electric | Influence passage of a federal standard for all electric storage tanks > 45 gallons by 2025. | |
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| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Explore appropriate solutions and applications of heat pump water heaters in multifamily. | Two original equipment manufacturers (OEMs) provide technical guide for multifamily by Q3. | One OEM provides technical guide for multifamily by Q4. | Action Required | While we did not meet this goal in 2023, significant progress was made, and we expect to meet it in early 2024. In 2023, OEMs did not publish multifamily-specific technical guides. However, all the major manufacturers have reviewed the Amazing Shrinking Room results and are looking forward to a second report with additional study elements sponsored by PG&E. In Q4, the program refreshed the BetterBricks, Multifamily, and Single Family technical bulletins, incorporating recent research and OEM feedback. Both bulletins are scheduled to be published early in 2024. |
| Increase installer adoption of HPWH in retrofit installations. | Percent of regional plumbers that list HPWH on their website increases ten percent by Q3. | Percent of regional plumbers that list HPWH on their website increases five percent by Q4. | On target | <p>In 2023, the program conducted direct interactions with contractors primarily through training sessions and email newsletters. Our Hot Water Solutions distribution list sent six newsletters to installers in the region, covering the following topics:</p> <ol style="list-style-type: none"> 1. Announcing new on-demand heat pump water heater training 2. Exploring the pros and cons of mixing valves for customers 3. Emphasizing the importance of having 4. HPWH content on their website 5. HPWH Day and its significance 6. Dispelling myths about HPWHs <p>Additionally, the program provided training to over 100 HVAC and Plumbing contractors, of which approximately a quarter took advantage of the new On-Demand training launched in Q1. Compared to a website review of over 250 regional installers from the beginning of the year, a Q4 review observed a 12 percent increase in the same list of installers, including HPWH or Hybrid water heater content on their websites.</p> | |



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|  Water Heating | Heat Pump Water Heaters (HPWHs) | | Emily Rosenbloom | Electric | Influence passage of a federal standard for all electric storage tanks > 45 gallons by 2025. | |
| | 2023 Operations Plan Milestones | | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Understand barriers to market acceptance of the proposed standard. | Complete research with installer focus groups to identify barriers to proposed standard by Q1. | Complete research with installer focus groups to identify barriers to proposed standard by Q3. | On target | The target was met in Q1. Findings from the research informed goals and key activities outlined in the HPWH 2024 Operations Plan. The combined report for this research and the Cold Climate Demonstration Installation Research will be posted in early 2024. As the final rule comes out, additional work will be scoped to understand any additional or unrealized challenges. | |



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| Water Heating Product Group | Efficient Gas Water Heating (EGWH) / Gas Heat Pump Water Heaters (GHPWH) | Aaron Winer | Gas | Develop program to accelerate product development of gas-fired heat pump water heater technology and create market conditions to accelerate market adoption to influence a federal manufacturing standard. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Assess utility commitment to supporting a GHPWH. | NEEA NGAC (Natural Gas Advisory Committee) and North American Gas Heat Pump (GHP) Collaborative formalize commitment platform. | NEEA NGAC indicates significant support for GHPWH. | Heads up | North American GHP Collaborative “Golden Carrot” draft report indicates members are currently unable to make financial commitments commensurate with those previously identified as required to significantly affect manufacturer decision making. Through NEEA’s Cycle 7 Business and Strategic Planning process, the draft plan has a focus area to support market transformation work of products that become commercialized and have a good regional fit. |
| | Drive GHPWH product advancement and testing. | Successful demonstration of UEF 1.0 in lab testing of current versions both absorption and adsorption technologies by Q4. | Successful demonstration of UEF 1.0 in lab testing of current version of one technology by Q4. | Action Required | North American testing of adsorption GHPWH prototype began later than expected and non-GHP component issue prevented achieving Uniform Energy Factor (UEF) >1 in initial testing. Resolution of issue and further testing planned Q1, 2024. Technology developer of absorption GHPWH has decided to focus on commercialization of GHP furnace/combi product in the near term, NEEA staff maintaining ongoing engagement |
| Understand certainty of commercialization timelines. | Two manufacturers initiating product advancement and process development activities by Q4. | One manufacturer initiating product advancement and process development activities by Q4. | Action Required | Regular meetings with manufacturers and technology developers, ongoing. Discussions with manufacturers regarding potential to commercialize adsorption GHPWH are focused on results of testing mentioned above; next steps delayed and will resume Q1, 2024. | |



Integrated Systems


| Initiative Name | Manager | Fuel Type | Initiative Goal |
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| HVAC Product Group | High-Performance HVAC / Very High Efficiency Dedicated Outside Air Systems (VHE DOAS) | Maria Murphy | Electric | Accelerate the adoption of high efficiency HVAC systems and components, and support commercial code advancement that requires the very high efficiency DOAS approach or equivalent efficiency by 2035. | |
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| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Educate and motivate early adopter manufacturer's reps/distributors to promote the system approach. | Six agreements in place with manufacturer's representative/distributor of compliant Energy/Heat Recovery Ventilators (E/HRVs) by Q2 2023. | Five agreements in place with manufacturer's representative/distributor of compliant E/HRVs by Q2 2023. | On target | All six agreements signed by end of Q1 2023 and held initial kick off meeting with all participants. |
| | Increase availability of qualifying E/HRVs. | At least two new capacities, two new price points, or two new manufacturers with eligible equipment. | At least one new capacity, one new price point or one new manufacturer with eligible equipment. | On target | In Q4, twelve new models were added to the NEEA's compliant E/HRV list; the most added in a single quarter since the list's inception. This brings the total number of compliant products to 86 models, a roughly 100 percent increase over the total number of compliant products listed in Q1 2023. |
| | Provide market data and evidence to influence the advancement of local, state, and federal codes. | One revised code change proposal submitted for ASHRAE 90.1-2025 development process. | One research activity completed for ASHRAE 90.1-2025 development process. | On target | In Q4, the team completed scanning work on market data/analysis to inform proposed DOAS definition revision for 2024 IECC and parallel incorporation into ASHRAE 90.1-2025. The results will inform follow-on work to be determined in early 2024. |
| Raise supply chain and end-user awareness of the system approach, and its significant cost savings and non-energy benefits. | Eight featured events in collaboration with alliance partners, key industry and/or professional/trade organizations. | Six featured events in collaboration with alliance partners, key industry and/or professional/ trade organizations. | On target | In Q4, VHE DOAS was discussed at eight events with over 200 people, mainly engineers and architects. These included two ASHRAE chapter meetings, one in Boise and one in Spokane, as well as four events at which the University of Washington Integrated Design Lab (UW IDL) represented the program to their partners and others in the Puget Sound area. | |



Integrated Systems


| Initiative Name | Manager | Fuel Type | Initiative Goal |
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| HVAC Product Group |  Advanced Heat Pumps Suzi Asmus Electric Develop program to lock in heat pump efficiency that is 30 percent more efficient than current standards via a series of improvements to the federal test procedure and minimum standard, driving transition from all electric heating to VSHP across all applications and optimizing performance with connected controls. | | | | | |
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| | 2023 Operations Plan Milestones | | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Identify highest value product features & capabilities for efficiency. | Complete product specification for at least four high value features and capabilities. | Define, estimate savings, and identify test method for at least three high value features and capabilities. | Heads Up | Definition, estimated savings, and method of test identified for three improvements (low load efficiency, cold climate capable, and the third, minimizing supplemental heat, being incorporated into the cold climate improvement). Definition and savings estimates have been generated for a fourth, connected commissioning. See the August 1, 2023 Product Council recording. https://neea.org/product-council-documents/vshp-advanced-features-and-capabilities-update-product-council | |
| Improve test procedure and metrics to better differentiate product performance. | Complete Ratings Representativeness project by Q4. | All field data collection completed in 2023. | Heads Up | The Rating Representativeness (RR) data collection was completed Q4 2023. Data analysis is expected by end of Q1 2024. A major success is that in the summer, NEEA and BPA submitted preliminary data from this RR project and BPA's High Performance High Capacity Heat Pump (HPHCHP) field test to the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) Unitary Small Equipment Standards Technical Committee (USE STC) hearings for residential heat pumps. Resulting AHRI test procedure draft expected to be proposed in DOE public process as early as 2024 and is likely to include significant improvements central to NEEA's Advanced Heat Pump program goals with help from the RR and HPHCHP data. | | |



Integrated Systems

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|  HVAC Product Group | Advanced Heat Pumps | Suzi Asmus | Electric | Develop program to lock in heat pump efficiency that is 30 percent more efficient than current standards via a series of improvements to the federal test procedure and minimum standard, driving transition from all electric heating to VSHP across all applications and optimizing performance with connected controls. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Increase market partner (both energy efficiency and industry) adoption of highest value features and capabilities. | Three high value features and capabilities gain manufacturer support (adopt or indicate plan to adopt). | One high value feature or capability gains manufacturer support. | Heads Up | <p>Six manufacturers agreed to collaborate with NEEA on developing the connected commissioning certification criteria, which is one of the high-priority improvements.</p> <p>With NEEA’s influence, the AHRI USE STC included in their proposed changes to the test procedure and rating standard elements that address four of NEEA’s lower-priority improvements: adaptive defrost, standby losses, crankcase heater and low load efficiency. This committee includes major manufacturers who voted in favor of these changes being adopted into the proposal. Resulting AHRI test procedure draft expected to be proposed in DOE public process as early as 2024 which is likely to include these improvements central to NEEA's Advanced Heat Pump program goals. Some improvements likely to go into effect in 2025, most significant changes will impact market around 2030 pending DOE public process.</p> |



Integrated Systems

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| HVAC Product Group | Efficient Rooftop Units (Efficient RTUs) | Jason Jones | Gas | Increase the efficiency of rooftop units through product differentiation and ultimately an updated federal standard by 2034 that requires at least 20 percent more efficient RTUs than the 2020 market average. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Create awareness of and support for Efficient RTUs from market actors (manufacturer reps, distributors, contractors) and utilities across the US and Canada. | By Q4, three partners reference Efficient RTU specification. | By Q4, one partner references Efficient RTU specification. | On target | Regular meetings are ongoing for regional market actors to align ERTU specification extra-regionally. This alignment will show increased demand to manufacturers for qualifying products. Minnesota's Center for Energy and Environment (MNCEE) has included ERVs as a measure in their Efficient RTU initiative, and the teams are aligning on talking points regarding insulation and leakage. NEEA has also partnered with Nicor Gas and Resource Innovations to align on the ERTU specification for market transformation efforts in Nicor's service territory and is working with CalMTA as they design their RTU initiative. |
| | Encourage manufacturers in developing and promoting Efficient RTUs for the light commercial market. | Agreement by Q2 from two manufacturers to produce and offer light commercial units. | Agreement by Q4 from one manufacturer to produce and offer light commercial units. | Heads up | Regular meetings with manufacturers are ongoing. One manufacturer has designed and is bringing an energy recovery ventilator product to market to be used in place of the economizer of their light commercial RTUs. This product will be available for wholesale purchase in 2024. |
| Finalize specification and refine QPL; identify partner/owner of specification and QPL. | Partner identified by Q1; partner identified by Q3. | Partner identified by Q3; partner identified by Q4. | Heads up | Specification and Prescriptive Path QPL is posted on BetterBricks.com and is being revised quarterly, or as needed. The Consortium for Energy Efficiency (CEE) and NEEA are still in discussion with CEE and their member utilities about the need for a national specification for efficient gas-fired RTUs. The program accomplished only one of two parts of this goal by year end. Specification is finalized, and QPL is being updated regularly. NEEA did not have a partner to own the specification and QPL by year end, therefore NEEA will continue to manage and host QPL and specification. | |



Integrated Systems

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| HVAC Product Group | Efficient Rooftop Units (Efficient RTUs) | Jason Jones | Gas | Increase the efficiency of rooftop units through product differentiation and ultimately an updated federal standard by 2034 that requires at least 20 percent more efficient RTUs than the 2020 market average. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Improve cost data, increase depth of understanding of costs of Efficient RTUs. | Q3 to acquire data. | Q4 to acquire data. | Action required | Did not collect improved cost data in 2023. Still working on the milestone assumptions on cost. NEEA staff is continuing to work with manufacturers and suppliers to acquire cost data for Efficient RTUs and ERVs in 2024. |



Integrated Systems

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| Lighting Product Group | Luminaire Level Lighting Controls (LLLC) | Anne Curran | Electric | Develop best practice specifications for luminaire level lighting controls, aiming to have the technology adopted as standard industry practice. | |
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| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Increase promotion of LLLC through key manufacturer sales channels. | 12 strategic engagements with specifiers done in collaboration with manufacturer or manufacturers' reps by Q4. | Ten strategic engagements with specifiers done in collaboration with manufacturer or manufacturers' reps by Q4. | On target | The program continued its efforts to partner with local manufacturer sales channels to engage and educate lighting specifiers, with collaborations on an event in Spokane in Q4. With 16 of these strategic engagements completed for the year, the program has surpassed the goal of 12. |
| | Increase visibility and demand for LLLC through strategic engagements. | LLLC program aligns with five partner organizations on LLLC focus. | LLLC program aligns with four partner organizations on LLLC focus. | On target | The program held multiple planning sessions with DesignLights Consortium in Q4 to align on shared priorities for advancing lighting controls adoption. The annual goal was met with that Q4 engagement plus collaboration earlier in the year with Minnesota's Center for Energy Efficiency, Illuminating Engineering Society (IES), Pacific Northwest National Lab and Department of Energy's Integrated Lighting Campaign. |
| Influence leading specifiers who focus on key target markets to include LLLC in their ongoing business practices. | Ten lighting specifier educational offerings (resources or events) with a focus on increasing decision maker understanding of LLLC value proposition by Q4. | Seven lighting specifier educational offerings (resources or events) with a focus on increasing decision maker understanding of LLLC value proposition by Q4. | On target | LLLC was featured at three industry events that reached a lighting specifier audience in Q4. Additionally, two additional online learning modules were produced in collaboration with manufacturers, and these were rolled out to NXT Level participants in Q4. Together with progress noted in previous quarters, this means the program exceeded its goal for the year with a total of 12 resources or events that targeted this key audience. | |



Integrated Systems

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| Building Envelope Product Group | High Performance Windows (HPW) | Tamara Anderson | Dual Fuel: Electric/Gas | Develop program to accelerate the adoption of high performance windows that reach 0.20 U-Factor or lower by increasing builder demand, influencing leading manufacturers to scale production and advancing the ENERGY STAR® criteria. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Engage with builders in a pilot to increase their use of High-Performance Windows as a standard offering in new homes. | Three builders grow their use of High-Performance Windows as standard offering in new homes in the Northwest by Q4. | Two builders grow their use of High-Performance Windows as standard offering in new homes in the Northwest by Q4. | On target | Two of the four builders who participated in the volume builder pilot for 2022 have committed to grow their use of High-Performance Windows as their standard offering in new homes in the Northwest, as documented in the exit interviews from the project and the 2022 final report. The other two builders who participated in the volume builder project for 2022 will continue to consider High-Performance Windows as a path to energy efficient homes. The program continued the volume builder pilot in 2023 with three different builders. Two of those builders have indicated that they will use High-Performance Windows as their standard offering in new homes in the Northwest. |
| Engage with manufacturers to co-create strategies for scaling future supply of High-Performance Windows to meet growing demand. | Two leading manufacturers supplying the Northwest develop roadmap to scale production of High-Performance Windows by Q2. | Two leading manufacturers supplying the Northwest develop roadmap to scale production of HPW by Q4. | On target | Two new brands have entered the thin-triple market, one of which is specifically targeting the northern climate zones and announced construction of a dedicated manufacturing plant. They join six other major manufacturers offering triple pane product in the northern climate zone. Incremental prices appear modest relative to code windows (\$40-80/window for an average sized window). Lead times are on par with code / double-pane windows as experienced through the builder pilot. Builders in NEEA's pilot had no problem or delays sourcing triple pane windows from multiple manufacturers. | |



Integrated Systems

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| Building Envelope Product | High Performance Windows | Tamara Anderson | Dual Fuel: Electric/Gas | Develop program to accelerate the adoption of high performance windows that reach 0.20 U-Factor or lower by increasing builder demand, influencing leading manufacturers to scale production and advancing the ENERGY STAR® criteria. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Finalize key intervention strategies and transition to Market Development. | Program Advancement presented to RPAC and NGAC by Q4. | Program Advancement presented to RPAC and NGAC by Q2 2024. | Action required | The High-Performance Windows program is in the Program Development phase and is currently uncertain of the path forward to Market Development. Using currently available data—not including non-energy benefits—the High-Performance Windows program does not meet NEEA’s Benefit/Cost Ratio threshold of >1 at the measure level now, nor will it in the near future. The program will remain in in the Program Development phase, with limited scope and resourcing in 2024, as the team continues to explore new data sources and other factors that might influence advancement. |



New Construction

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| New Construction Product | Manufactured Homes (MH) | Mark Rehley | Electric | Leverage the Northwest Energy-Efficient Manufactured Housing Program (NEEM) infrastructure to ensure a voluntary above-code manufacturing specification exists after the upcoming HUD code change, allowing for future energy savings to be captured by the region. | |
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Complete final research projects to prepare the program for LTMT. | Complete final studies by Q4. | Complete final studies by Q2 2024. | On target | Market Progress Evaluation Report (MPER) project started in Q2 and was completed in Q4. |
| | Provide technical support to manufacturers in preparation of new ENERGY STAR specification. | Four manufacturers demonstrate ENERGY STAR level by building one home by Q4. | Two manufacturers demonstrate ENERGY STAR level by Q4 | On target | This goal is on target. One corporate owner who owns two factories worked with Northwest Energy Works to test a heat pump ready home with field installed outdoor unit and verification. |



Infrastructure

| Initiative Name | Manager | Fuel Type | Initiative Goal |
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| Infrastructure Programs | BetterBricks | Josh Pelham | Electric | To support the alliance’s commercial and industrial programs by fostering market relationships and providing tools and resources to help raise market awareness and capability for energy-efficient products, services and practices. | |
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| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Create new market engagement opportunities and develop deeper market understanding to support current and future market transformation efforts. | Identify and partner with three influential market leaders to engage and educate commercial building market. | Identify and partner with two influential market leaders to engage and educate commercial building market. | On target | In Q4, BetterBricks attended and presented at 12 Northwest conferences, webinars and/or lunch-and-learns to support education and awareness efforts around the alliance's commercial programs. Topics covered ranged from lighting and HVAC, to new programs like centralized heat pump water heaters and efficient fans. Of these 12 events, four were targeted collaborations with key market leaders, including three regional ASHRAE chapters (Puget Sound, Inland Empire and Idaho) and the Washington Association of Maintenance and Operation Administrators (WAMOA). |
| Increase awareness, access, relevance, and utilization of BetterBricks resources to move the market toward higher performing buildings. | Partner with program teams and/or market leaders to develop seven new resources specific to whole building efficiency or integrated design. | Partner with program teams and/or market leaders to develop five new resources specific to whole building efficiency or integrated design. | On target | In Q4 of 2023, BetterBricks released: 1) three new blog posts on efficient fans, 2) one case study featuring an LLLC installation in a manufacturing facility in Mukilteo, WA, and 3) three new resources showcasing centralized heat pump water heaters and efficient fans. The team also participated in six interviews with building owners and property managers to support ongoing research efforts to better understand decision-making process for whole-building upgrades. | |



Infrastructure

| Initiative Name | Manager | Fuel Type | Initiative Goal |
|-----------------|---------|-----------|-----------------|
|-----------------|---------|-----------|-----------------|

| Infrastructure Programs | Commercial and Industrial Strategic Energy Management (SEM) | Suzi Asmus | Electric | Sustained adoption of SEM is valued, desired, and implemented by a majority of Northwest business owners. | |
|-------------------------|---|---|--|---|---|
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Add high-value SEM tools and resources to the SEMHub. | Improve functionality of Energy Management Assessment (EMA) tool with improved reporting capabilities and add eight new resources posted to SEMHub.com. | Improve functionality of EMA tool with improved reporting capabilities and add six new resources posted to SEMHub.com. | On target | Exceeded goal for number of new resources added to SEMHub.com in 2023 with 12 new resources added in 2023. Website improvements included redesigning and improving access to the Collections function and adding five new curated collections. Redesigned Case Study layout to improve user experience. In Q1, the program identified a list of EMA tool reporting improvements. During Q2 and Q3, NEEA worked with the website developer to begin implementing these improvements. Report improvements went live in Q4 which included greater customization of the reports including Executive Summary, order of recommendations, and final report content. Find out more here: https://semhub.com/news/tailor-your-ema-report-to-customer-needs |



Infrastructure

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|-----------------|---------|-----------|-----------------|
|-----------------|---------|-----------|-----------------|

| Infrastructure Programs | Commercial and Industrial Strategic Energy Management (SEM) | Suzi Asmus | Electric | Sustained adoption of SEM is valued, desired, and implemented by a majority of Northwest business owners. | |
|-------------------------|--|---|---|---|---|
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | Advance plan to transition the collaborative and other SEM assets to regional and National Stakeholders by 2025. | Transition plan defined for all SEM assets. With partners identified. | Transition plan defined for all SEM assets. | On target | <p>The North American SEM Collaborative and the Northwest SEM Collaborative entered into a Memorandum of Understanding in Q2 to move forward with forming a partnership between the two Collaboratives, exploring a chapter or regional model for the Northwest and other additional regions to follow to be supported under the American Council for an Energy-Efficient Economy (ACEEE) and North American SEM Collaborative structure. The two Collaboratives have formed a joint Transition Subcommittee and are meeting monthly to work through details of the transition.</p> <p>In Q1, the SEM Funder Work Group provided feedback on transition options for regional SEM assets (Energy Management Assessment Tool, Energy Talk Cards, online learning modules, and resource library) and NEEA began outreach to potential future partners. The North American SEM Collaborative has confirmed commitment to take on SEMHub and continue to host and make available the Energy Talk Cards and online learning modules. The Lawrence Berkeley National Laboratory, in partnership with the Department of Energy, has confirmed commitment to host the Energy Management Assessment tool for three to five more years past the regional funding on their own website.</p> |



Infrastructure

| Initiative Name | Manager | Fuel Type | Initiative Goal |
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| Infrastructure Programs | Commercial and Industrial Strategic Energy Management (SEM) | Suzi Asmus | Electric | Sustained adoption of SEM is valued, desired, and implemented by a majority of Northwest business owners. | |
|-------------------------|--|---|---|---|---|
| | 2023 Operations Plan Milestones | Target | Threshold | Status as of 1/26/2024 | Comment |
| | SEM practitioners actively collaborate with one another on shared challenges via Alliance-sponsored structure. | A minimum of two funder meetings to align on Learning Management System refresh modules and additional platform improvements. Four active working groups who each deliver a new regional resource. 80 or more attendees at the Fall Workshop. | A minimum of two funder meetings to align on Learning Management System refresh modules and additional platform improvements. Three active working groups who each deliver a new regional resource. At least 60 attendees at the Fall Workshop. | On target | <p>The SEM Funder Work Group met in January and aligned on 2023 investments and asset and platform improvements. The group met again in November to hear updates on the future planning for the Alliance tools and Collaborative, and approved identified partners.</p> <p>Five Northwest SEM Collaborative working groups formed for 2023. All five groups met multiple times throughout 2023 and all presented on their collaborative work at the regional SEM Fall Workshop in October. One group, Beyond the E, developed and shared with the region a new original resource: "Leveraging Lean Management and SEM for Improved DEI Engagement".</p> |