

Natural Gas Advisory Committee

Q3 2024 Interim Webinar



DATE: Sept 19, 2024

TIME: 1:00 – 2:00pm Pacific

LOCATION: Virtual – Microsoft Teams

WEBINAR: [Click here to join the meeting](#) (Meeting ID: 261 408 289 122 | Passcode: rPiPFu)
(if needed) Call-in audio only: 971-323-0535 | Phone Conference ID: 370 970 792#

AGENDA (All Times Pacific)

1:00-1:05 (5 min)	Welcome and Introductions	Alisyn Maggiora	
1:05-1:50 (45 min)	Overview & Discussion: Gas Portfolio Evolution • Policy update • Recap of board-level discussions • Review proposed portfolio changes • Discussion <i>Desired Outcome: Committee members are aware of latest developments and discussions at the board level regarding the gas portfolio for NEEA's next business cycle (2025-29), ahead of the 2025 draft operations plan webinar (scheduled for Oct 16).</i>	Jonathan Belais Virginia Mersereau Peter Christeleit Becky Walker	Pg. 2-5
1:50-1:55 (5 min)	Public comment, wrap up and adjourn	Alisyn Maggiora	

Informational Updates: (items not discussed during the meeting)

- Pages 6-17: Q2 2024 Portfolio Update
- Pages 18-19: High-Performance Windows Update (implications for 2025 portfolio)
- Pages 20-22: Q2 2024 Financials

Additional Resources:

- **Latest Functional Newsletters:**
 - Q2 2024 Newsletter – [Market Research and Evaluation](#)
 - Q2 2024 Newsletter – [Emerging Technology](#)
 - Q2 2024 Newsletter – [Codes, Standards and New Construction](#)
- **Recent NGAC Meeting Materials (Q2 2024)**
 - April 24 [Packet](#), [Slides](#), [Notes](#)
- [NGAC Charter](#)

Memorandum



Date: September 19, 2024

To: Natural Gas Advisory Committee

From: Becky Walker and Peter Christeleit, NEEA Staff

Subject: Natural Gas Portfolio Evolution

Given recent legislative changes in Washington and subsequent Board discussions, this memo describes a proposed evolution of NEEA's Natural Gas portfolio toward more dual-fuel and fuel-neutral measures, along with principles, activities, and programs. These principles and portfolio shifts have been discussed and are supported by the Board, Natural Gas Committee, and Strategic Planning Committee and will be reflected in the 2025 Operations Plan. These changes are intended to keep the gas-funded portfolio together and reflects an overlap of shared interests between the areas of work with maximum potential regional savings and areas of work permissible by regulatory policy.

Because these discussions have been limited to NEEA staff and Board to date, NEEA staff want to spend some time with Natural Gas Advisory Committee members to discuss Cycle 7 priorities and get feedback ahead of the public Operations Plan webinar on October 16.

Ask: Please review and bring questions and feedback to the September 19 discussion.

Proposed Evolution of NEEA's Natural Gas Portfolio

Principles for the next generation of NEEA's Natural Gas Portfolio work:

- The portfolio will increase market adoption of affordable energy 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.
- The focus of the portfolio will shift towards 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.

Portfolio Components:

The table below describes what a potential Cycle 7 portfolio could look like based on currently identified opportunities and applying the above principles. Note that all programs described below will proceed through the normal Initiative Lifecycle advancement process which includes a vote by the Natural Gas Advisory Committee.

Most of the Board-approved Cycle 7 budget can be reallocated towards the newly proposed programs in accordance with the principles listed above. NEEA staff anticipate potential budget reduction related to

reducing work in the residential sector and co-funding with the electric portfolio where there are electric benefits from fuel-neutral and dual-fuel work.

Program/Activity	CYCLE 6 Progress	CYCLE 7 Business Plan (original)	CYCLE 7 Business Plan: Proposed Updates
COMMERCIAL PROGRAMS			
Efficient RTU (fuel-neutral / dual-fuel)	Advanced into market development; moving to fuel-neutral in 2024	Continue	EXPAND: Explore expanding program to include dual-fuel RTUs.
High Efficiency Dedicated Outdoor Air Systems (fuel-neutral)	Scanning	N/A	ADD: Explore adding High Efficiency Dedicated Outdoor Air System for gas systems (would likely be an expansion of the current electric program, thereby becoming a fuel-neutral program).
Advanced Commercial Gas Water Heating (gas efficiency or fuel-neutral)	Started program development in 2023	Continue and advance	Continue and advance: Continue working on advancing to market development phase, plus potentially EXPAND dual-fuel component.
Efficient Commercial Laundry (gas efficiency or fuel-neutral)	Scanning	Scanning and advance	ADD: Explore adding as a new fuel-neutral program (technology has both gas and electric applications).

Program/Activity	CYCLE 6 Progress	CYCLE 7 Business Plan (original)	CYCLE 7 Business Plan: Proposed Updates
RESIDENTIAL PROGRAMS			
Residential Dual-fuel HVAC (dual-fuel)	Scanning and workgroups	ADD: Residential Dual-Fuel HVAC	ADD: Residential Dual-Fuel HVAC
Efficient Residential Gas Water Heating (gas efficiency)	Efficient Residential Gas Water Heating	Continue	STOP: Wind down activities due to policy directives in Washington and market headwinds; continue engagement with North American Gas Heat Pump Collaborative and other utilities and industry groups as a part of scanning and codes and standards.
High Performance Windows (fuel-neutral)	Started program development in 2021	Continue	STOP: Wind down activities due to not meeting program advancement criteria; window and envelope activities will continue in scanning and codes and standards.
ADDITIONAL PORTFOLIO ACTIVITIES			
Regional Stock Assessments	CONTINUE	CONTINUE	CONTINUE
Codes & Standards	CONTINUE	CONTINUE	CONTINUE
Analytics, Market Research and Evaluation	CONTINUE	CONTINUE	CONTINUE
Emerging Technology Scanning	CONTINUE	CONTINUE	CONTINUE
Convene and Collaborate	CONTINUE	CONTINUE	CONTINUE
BUDGET	\$18.9M	\$35.3M	\$33.5M
Budget Drivers		From C6 to C7 Business Plan: Increased portfolio, advancing 2-3 programs to market	From C7 Business Plan to current proposed portfolio: Decreased portfolio costs due to removing Efficient Gas Water Heating and High-Performance Windows; some of the budget reallocated to support additional

		• Increased emerging technology to support larger portfolio • Increased due to inflation • Reduced codes and new construction	commercial and dual-fuel work
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Natural Gas Progress Report

Northwest Energy Efficiency Alliance (NEEA)

Q2 2024 Highlights

Northwest Energy Efficiency Alliance
700 NE Multnomah, suite 1300
Portland, Oregon 97232
p 503.688.5400
neea.org
info@neea.org



Scanning

- Combi (Gas Absorption Heat Pump – GAHP)
 - Received draft report for multi-family and single-family field study.
 - Vicot V20 lab testing near completion. Expected report in Q4 2024.
- Dual-Fuel
 - GTI Energy lab testing Dual-fuel systems in a virtual home environment in collaboration with Utilization Technology Development.
 - Dual-fuel modeling in-progress
 - Began scoping residential dual-fuel HVAC technology field demonstration
- Commercial Dryers
 - Working with partners to support study of next generation desiccant-based clothes dryer system.
- Commercial Water Heating
 - Gas Heat Pump monobloc and Dual Fuel modeling of commercial water heating underway
 - Scoping commercial water heating field demonstrations
- Residential Water Heating
 - Completed design review of Alpha prototype and provided developer with guidance to implement into a Beta prototype

Codes, Standards, and New Construction

Codes & Standards

In the second quarter of 2024, NEEA staff submitted one comment letter in response to requests from the Department of Energy.

- Consumer Products:- Efficiency Conservation Standard - RFI (Request for information) - Request for Information Pertaining to Standards for Dishwashers, Residential Clothes Washers and Consumer Clothes Dryers

Washington

- Commercial Code: Following the completion of the 2021 Washington State Energy Code for commercial and residential, the State Building Code Council (SBCC) began the process of developing the 2024 Washington State Energy Code— Commercial (WSEC-C) in by rebuilding the Commercial Energy technical advisory group (TAG), this new code saw limited progress in Q2 2024.
- Residential Code: The Washington State Energy Code – Residential went into effect in March 2024. No action has been taken by the State building Could Council to start the 2024 code process in Q2, 2024.

Montana

- In Q2 2024, the Montana Building Code Council voted to approve proposed amendments to the state's current energy code. These significant further amendments to the 2021 IECC include, among other changes, removal of the requirements for secondary side lit zones, automatic receptacle control, energy monitoring in the commercial energy code, and reduction in stringency in one of the prescriptive wall insulation options in the residential energy code.
- The National Center for Appropriate Technology (NCAT) hosted the Montana Homes Collaborative (MHC) Building Science Workshop for builders, code officials and home designers in Butte, MT on June 26, 2024. Most of the presenters were members of the MHC. Topics ranged from retrofitting homes for greater energy efficiency to ventilation requirements for residential buildings in cold climates.
- NCAT also published on the MHC website a resource entitled "Montana Roadmap to Home Energy Efficiency and Affordability," which contains 10 recommendations on foundation types, wall assemblies and building envelope, and ventilation among others.

Oregon

- Commercial: Q2 2024 saw continued delays in the 2024 Oregon Energy Efficiency Specialty Code (OEESC) adoption process. A first draft of the 2024 OEESC, which is based on the model standard ASHRAE 90.1 2022, was reviewed and approved in October 2023, but rulemaking steps were stalled until April 2024 because the COMcheck software version for ASHRAE 90.1-2022 was not yet available. However, software bugs in this new COMcheck version have further delayed the target adoption date to October 1, 2024 (nine months later than originally planned). Thus, the 2024 OEESC is now expected to go into effect six months later on April 1, 2025. While ASHRAE 90.1-2022 is expected to deliver an approximate 10% increase in energy efficiency from the current code (2021 OEESC), the 2024 OEESC final draft includes weakening amendments.
- Residential: The 2023 Oregon Residential Specialty Code (ORSC) went into full effect on April 1, 2024. A University of Oregon analysis found it to be about 12.5% more efficient than the 2021 ORSC. Compared to the model 2021 IECC, the Oregon Building Codes Division (BCD) reported the 2023 ORSC is at least as efficient. Previous U.S. DOE analysis found it to be 5.7% less efficient than 2021 IECC, but a forthcoming revised analysis that better captures unique elements of this custom state-developed code is expected to better align with the state's findings. BCD also finished the process of updating the Oregon Residential Reach Code (ORRC). After BCD posted a final draft of the 2023 ORRC in Q1 2024, it was approved and went into effect (as a wholly voluntary standard) on July 1, 2024.

Idaho

- After the Idaho Energy Code Collaborative presented IECC 2021 and IECC 2024 to the Idaho Building Code Board, the Building Code Board voted unanimously to consider IECC 2024 rather than IECC 2021 at its June 18, 2024 meeting. The Board expressed desire to update all codes to the most recent versions available and will continue its review of IECC 2024 and explore which amendments to consider.

International Energy Conservation Code (IECC):

- In Q2 2024, the International Code Council (ICC) implemented its Board's decision to make significant changes to the 2024 IECC following the appeals process in Q1 2024. The changes removed provisions that would have promoted electrification and streamlined future installation of features like rooftop solar, electric vehicles, demand response and energy storage. Official redline versions of the 2024 IECC were made available in June 2024, and the final 2024 IECC is expected to be published in July 2024. Looking ahead to the 2027 IECC development process, the ICC Board also directed steps be taken to

clarify the scope and intent of the IECC and to improve the transparency and efficiency of the code development process. NEEA's influence in this process reaches beyond the code change proposals the alliance submitted earlier in the development process; NEEA staff are voting members of the main Commercial code committee as well as the Residential and Commercial HVAC and Refrigeration (HVACR) and Water Heating subcommittees.

New Construction

NEEA staff continue to support utility programs participating in the Performance Path above-code new construction program. Data is collected monthly on homes built and rated. Additionally, training resources are developed and distributed through NEEA's BetterBuiltNW newsletter and website <https://betterbuiltnw.com/>.

Other Updates

- Highlights from the North American Gas Heat Pump (GHP) Collaborative include:
 - Commercial GHP Committee:
 - Finalized funding commitments for 2024-2025 activities, largely focused on market research
 - Initiated North American commercial water heating market characterization scope development
 - Currently performing "manufacturer interviews" to identify barriers/challenges, areas of committee support
- Alliance staff attended multiple meetings/workshops highlighting Northwest progress, identifying opportunities to collaborate and gaining industry insight. Events included:
 - GTI Energy Emerging Technology Program Meeting: Staff attended meetings to understand updates on numerous efficient gas technology testing and demonstration projects, share Northwest successes/learnings and identify collaboration opportunities.
 - Efficiency Exchange: Staff were involved in multiple sessions and ancillary discussions, including:
 - Hosting lunchtime dual fuel roundtable discussion, attended by multiple utility and efficiency organization representatives. Learnings reaffirmed regional interest in exploring efficiency and ancillary benefits of emerging dual-fuel residential HVAC technologies.
 - CEE Summer Meeting: Staff attended conference and ancillary meetings, including:

- Speaking at multiple conference sessions to highlight the Alliance's work related to gas heat pumps, dual-fuel products, and other efficient gas technologies.
- Utilizing the highly attended conference to meet with key stakeholders and partners, including:
 - Extra-regional gas efficiency partners
 - Research institutions
- Energy Solutions Center – Technology & Market Assessment Forum (TMAF) meeting: Staff attended meetings, including:
 - Speaking at session to highlight multi-family field demonstration. Using a gas absorption heat pump, the project highlighted significant gas savings.

Advanced Commercial Gas Water Heating

2024 Goal	Key Success Metric	Status	Progress and Next Steps
Validate product performance and energy savings.	Successful demonstrations of two commercialized GHP products (Threshold: Demonstration of one product)	Heads Up	- Prioritizing Robur, Vicot, and SMTI GHP products based on previous product testing and market readiness/availability. - Compiling lab/field testing results done for all currently available products. - Identifying possible field and/or lab demonstration opportunities. Installations projected for Q1 2025. - Please reach out to program team if you are interested in having a GHP field demonstration in your service area.
Refine target market and value proposition, integrating findings into updated project strategy.	Complete market research, initiate market characterization and pilot incentive program(Threshold: Complete market research and initiate market characterization)	Heads Up	- Initiating “Market Research on Existing Water Heaters in Select Commercial Buildings,” with a focus on confirming lodging, restaurants, and multifamily target applications. - Market research effort to be completed in Q4 2024. - Developing RFP for the “North American Commercial Water Heater Market Characterization Study.” - Funded by the North American Gas Heat Pump Collaborative and led by NEEA. - NW supply chain still developing and building confidence in technology; not ready to commit to stocking incentive pilot program. Threshold will not be met. - NEEA is reallocating funds to other initiatives in the gas portfolio.

Activities, achievements, or events

- Engaged extra-regionally to identify and coordinate field demonstration candidates in our region.
- Scoped water heating modeling study with GTI to further showcase the value of gas heat pumps and quantify the performance of multiple configurations of gas heat pumps in various commercial building type and climate zone simulations. Expecting results Q1 2025.

Efficient Rooftop Units (Efficient RTUs)

2024 Goal	Key Success Metric	Status	Progress and Next Steps
Encourage manufacturers to develop and promote Efficient RTUs for the light commercial market.	Engage minimum of 4 manufacturers to provide either new eligible equipment, 2 new price points, or 2 expanded products under 12 tons (Threshold: Engage a minimum of 2 manufactures, to provide either new equipment, 1 new price point, or 1 expanded product).	Heads Up	- One manufacturer (Daikin North America) has designed and is bringing an energy recovery ventilator (ERV) product to market to be used in place of the economizer of their light commercial RTUs. The first products will be in production in August 2024. The team is working with other manufacturers to bring products to market but have no commitments yet. Expecting to reach threshold of 2 manufacturers by end of year. - The program has partnered with the Consortium for Energy Efficiency (CEE) and extra-regional partners to develop manufacturer engagement plans to align on future RTU design improvements. Currently, the group is meeting every two months as a special project committee under CEE's Commercial AC and HP committee.
Create awareness of and support for Efficient RTUs from market actors (manufacturers, manufacturer reps, distributors, contractors) and utilities across the US and Canada.	By Q2 six manufacturers/distributors /manufacturer reps recruited to partner and submit data showing Efficient RTU sales (Threshold: By Q4 four manufacturers/distributors /manufacturer reps recruited)	Heads Up	- Regular meetings with distributors and manufacturer reps are ongoing. - One manufacturer rep has begun submitting initial sales/pipeline data. - Program is working to contract with Outreach and Incentive Implementation vendor for engagement in Q2. - Expecting to reach threshold of 4 manufacturers by year end.
Work with alliance stakeholders to increase utility programs that reference NEEA's Efficient RTU specification.	Get commitments from four Northwest utilities by Q2 2024 to offer Efficient RTU measures. (Threshold: Commitments from two Northwest utilities by Q4)	Heads Up	- Team had meetings with Northwest natural gas utilities in Q1 and Q2 to discuss measures related to Efficient RTUs. - Ongoing discussions with the RTF to develop RTU measure for the region. - Expect to meet threshold of 2 NW utilities by end of year.

Activities, achievements, or events

- Team moderated and presented at a Rooftop Unit panel at Efficiency Exchange in Spokane, WA. Panel presented on RTU technologies, including gas efficiency as a decarbonization strategy.
- The team is meeting regularly with utilities and efficiency organizations across North America in partnership with CEE for alignment of RTU efficiency measures across fuel types and climate zones. Two meetings have been held to align on messaging to RTU manufacturers at CEE's Industry Partners meeting in September.
- KBOO field test of a Tier 2 RTU and code-level RTU w/ bolt-on ERV wrapped up in Q2. Report will be available in Q3.

Efficient Gas Water Heaters

2024 Goal	Key Success Metric	Status	Progress and Next Steps
Develop regional residential GHPWH market acceleration strategy.	Finalized regional market acceleration strategy by Q4 (Threshold: Draft strategy complete)	Action Required	- Due to ongoing testing delays (referenced below) and lack of interest in commercialization, team is suspending activities related to developing regional launch strategy. - Associated budget reallocated to other gas portfolio activities with near-term opportunities.
Support expedited review of residential GHPWH business case and initiation of commercialization.	2 manufacturers initiating commercialization stagegate process (Threshold: 1 manufacturer initiating commercialization)	Action Required	- The team continues holding numerous meetings with manufacturers and technology developers; currently, no indications of commercialization stage gate initiation. - Began condensing gas storage water heater market research, expecting a final report by Q4 2024.
Scan market to identify additional options.	2 additional technologies identified (Threshold: 1 additional technology identified)	Action Required	- Adsorption GHPWH testing delays ongoing; strategy shifted to focus on conducting design review (expected late Q4) and identifying partners to take lead on further product advancement and testing. - Associated budget reallocated to other gas portfolio activities with near-term opportunities.

Activities, achievements, or events

- As noted above, ongoing delays with testing and development of adsorption GHPWH have impacted all 2024 goals. The team has reallocated 2024 budget to other gas portfolio activities and began identifying strategy for shifting future activities focusing on scanning and monitoring. Additional details will be provided in the Q4 update.

High-Performance Windows

2024 Goal	Key Success Metric	Status	Progress and Next Steps
Evaluate the alliance's influence to-date via program efforts and participation via the Partnership for Advanced Windows Solutions (PAWS) on the ENERGY STAR® Residential Windows, Doors, and Skylights Version 7.0 Specification.	Complete ENERGY STAR Version 7 Influence Study by Q2 2024. (Threshold: Complete ENERGY STAR Version 7 Influence Study by Q3 2024.)	Head's Up	• NEEA's ENERGY STAR Version 7 Influence Study was kicked off in Q2. • The work for the study will begin in Q3 and the team anticipates this evaluation to be completed by the end of Q4.
Engage major manufacturers and/or window suppliers to acquire sales data and learn about their go-to market strategies for high-performance windows.	Confirm three partners to supply sales data by Q2 2024. (Threshold: Confirm two partners to supply sales data by Q4 2024.)	Action Required	• The team actively collaborated with contractor (TRC) to leverage contacts and relationships from the builder project with major Northwest window suppliers for data acquisition. • The team met with two major suppliers, with follow-up in progress. • Additionally, the team is working with extra-regional partners to pursue sales data from national manufacturers and unify their request. • Although no data contracts have been set up by the end of Q2, the team remains engaged in this activity.
Continue the Volume Builder Project and complete an in-progress project with national production builder.	Document lessons learned by Q4 2024. (Threshold: Document lessons learned by Q1 2025.)	On target	• 80 of 100 homes have been completed by the end of Q2. • The window purchases are forecasted be completed in early Q4. • The program team will conduct an exit interview with the builder to document lessons learned in Q4.

Activities, achievements, or events

- Tamara Anderson, NEEA High-Performance Windows Program Manager, co-authored a peer reviewed paper with Isaac Smith and Steve Sylvestre of MN CEE for the [2024 ACEEE Summer Study on Energy Efficiency in Buildings](#) on High-Performance Windows which highlighted the Volume Builder Project. We also collaborated on an informal session at the conference and a poster session; details from that session below.

Informal Session Description: There are over 55 million windows sold annually and windows installed today will likely be around in 2060, given their 35-45 year lifetime. This makes it critical to influence window purchases today, as they have an outsized impact on summer and winter peak demand well into the future. However, we still see very few window programs in our industry. This session will discuss how integral windows are to achieving our energy savings and emissions goals, and provide an overview of resources from the Partnership for Advanced Window Solutions (PAWS) that can help you launch, pilot, and administer successful window programs.

Discussion Questions:

1. *What has been your experience with window programs to date?*
2. *What opportunities and barriers do you foresee?*
3. *What information and resources would be helpful for you to implement a windows program or measure?*
4. *What questions do you have about windows and how they could fit, or not, within utility programs?*

Memorandum – *Informational* (Tier 2)



August 15, 2024

TO: Regional Portfolio Advisory Committee (RPAC)

FROM: Emily Moore, Director, Portfolio and Tamara Anderson, Program Manager

SUBJECT: High-Performance Windows Program Update

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Program Update

After careful consideration, NEEA staff has decided to move the High-Performance Windows (HPW) program from the Program Development phase back to Scanning beginning in 2025. In 2024, NEEA had paused program development activities to further assess the program's benefit-cost ratio (BCR) and data challenges, which continue to be hurdles for the program's viability. Acknowledging when a program in development is not proving out and re-prioritizing resources for more promising MT opportunities is an expected outcome of NEEA's milestone stage gate process and is part of the over-arching value of the alliance in pooling resources and risks.

Background:

Since 2021, the High-Performance Windows program has been in Program Development, developing key strategies to help accelerate the adoption of high-performance windows. HPW, as defined by NEEA, are residential, primary windows with a U-Factor of 0.22 or lower. HPW also offer multiple high-value, non-energy benefits, including thermal comfort, reduced glare, and noise reduction. HPW also, like all building envelope measures, have a fuel-neutral benefit.

Key barriers for market adoption of HPW include low awareness of HPW from builders and installers, high first cost with a delayed return on investment, and perceived installation difficulty. Key program interventions have included development of market awareness via the Volume Builder Project, and documenting results in case studies ([Confederated Tribes of Grande Ronde](#), [Habitat for Humanity Bend/Redmond](#), and [Lennar](#)). The long-term goal has been for the current definition of HPW to be established as the go-to product for all homes, via inclusion in increasingly stringent codes while simultaneously increasingly advancing future iterations of the ENERGY STAR® specification.

Current Status:

After almost 3 years in Program Development, opportunities for transforming the market for residential primary windows remain. However, NEEA has also encountered significant challenges to advancing the HPW program to the Market Development phase. As acknowledged in the 2024 Operations Plan, the program has been at a crossroads given BCR and data challenges and limited activities this year to evaluating NEEA's influence to-date on the market and ENERGY STAR Residential Windows version 7 specification, continuing to engage manufacturers and suppliers, and completing the remaining Volume Builder Pilot project.

Current Opportunities Include:

- HPW are more available in the market and are available from all major window manufacturers with lead times on par with double-pane or code complaint alternatives.
- The [ENERGY STAR V7](#) prescriptive path specification meets the target U-Factor of 0.22 set by NEEA.
- Interest in HPW is growing from builders and installers. Growing demand may lead to eventual decrease in pricing via manufacturers and local window suppliers.

Current Challenges Include:

- Current savings rates from the RTF's Single-Family Weatherization UES create a benefit cost ratio below the program target of 1, which makes the HPW program not viable.
- Lack of data from manufacturers prohibits a deeper understanding of the market and prohibits measurability for energy savings moving forward.
- In general, there has been a lack of interest in promoting HPW from manufacturers and window suppliers, as well as from industry organizations.

The Path Forward:

Going forward, NEEA Product Management staff will maintain relationships with manufacturers, monitor the RTF unit energy savings updates and/or data availability to inform potential positive updates to NEEA's benefit/cost ratio, leverage national and extra-regional partnerships for the purpose of aligning Market Transformation strategies, and monitor the market and policy landscape for opportunities to re-enter the market at a future time.

- Given the continued challenges for the program, NEEA staff has decided to discontinue the HPW program as a standalone program for 2025.
- Building Envelope scanning projects including a Commercial Secondary Windows Field Study, Grid-interactive Net Zero manufactured homes, and vacuum insulated panel retrofits.
- Utilities may consider and/or continue to develop programs focusing on retrofit and replacement of single-pane windows for HPW.
 - There is a Utility Program Collaboration working group via the Partnership for Advanced Window Solutions (PAWS) with information [here](#) for utilities interested in creating programs.
 - PAWS resources include the [Utility Playbook](#).
- NEEA plans to continue to monitor the HPW market, as well as change in the policy landscape and may enter back into the market at some time in the future when the time is right.

Please contact [Tamara Anderson](#), tanderson@neea.org if you have questions about the **HPW** Program.

Memorandum – *Agenda item*



September 19, 2024

TO: Natural Gas Advisory Committee (NGAC)
FROM: Peter Christeleit, Senior Manager, Corporate Strategy & Stakeholder Relations
SUBJECT: Natural Gas Portfolio Budget

The following two pages show the reports that will be presented to the Finance and Audit Committee (FAC). Due to the timing of quarterly meetings, the NGAC financial report is prepared before the FAC and board financial reports. Because of this timing and the review process for the board materials, there may be occasions when information given to the NGAC differs from information given to the FAC and board.

The first report shows variance by product group:

- The first section (**Year to date as of June 2024**) shows actual expenditures YTD versus the YTD 2024 approved budget.
- The second section (**Full Fiscal Year 2024**) provides an annual outlook of the 2024 approved budget versus our current 2024 forecast.
- Impact of Variance column is labeled on a Green/Yellow/Red scale, with the determination being based on qualitative and quantitative assessment by our team at the time of reporting.

The second report, Natural Gas Variance by Primary Strategy, shows the same information as the first report, but breaks out Direct Expenses and Labor/G&A.

Natural Gas Variance Report by Product Group										
	Year to date as of June 2024				Impact of Variance	Full Fiscal Year 2024				Notes
	Actuals (\$K)	Budget (\$K)	Variance (\$K)	% Var		Annual Budget (\$K)	Annual Forecast (\$K)	Variance (\$K)	% Var	
Compensation and Benefits	573	599	(26)	(4%)	Y	1,203	1,013	(191)	(16%)	Annual forecast reduced due to vacancies at beginning of the year and second half of the year.
General and Administrative	533	533	1	0%		1,052	1,052	1	0%	
Emerging Technology (Direct Expense)	73	450	(377)	(84%)	G	900	903	3	0%	Annual budget shifted from Emerging Tech to Advanced Commercial Water Heating upon Concept Advancement approval at the end of 2023. Some anticipated expenses were delayed while hiring a Program Manager for this new program.
Building Envelope (Direct Expense)										
High-Performance Windows	14	30	(16)	(53%)	G	51	43	(8)	(15%)	Program is intentionally pulling back on data collection efforts and marketing activities resulting in forecasted reduction in data stipends
Total Build Envelope	14	30	(16)	(53%)		51	43	(8)	(15%)	
HVAC (Direct Expense)										
Gas : Rooftop HVAC	194	272	(78)	(29%)	Y	500	500	0	0%	Delays in securing outreach implementation contract have led to lower than expected spend through Q2
Market Strategy	61	67	(6)	(9%)	G	87	106	19	22%	
Total HVAC	255	339	(84)	(25%)		587	606	19	3%	
Water Heating (Direct Expense)										
Gas : Advanced Commercial Water Heating	27	50	(23)	(47%)	G	90	230	140	156%	Annual budget shifted from Emerging Tech to Advanced Commercial Water Heating upon Concept Advancement approval at the end of 2023. Some anticipated expenses were delayed while hiring a Program Manager for this new program.
Gas : Heat Pump Water Heaters	52	200	(148)	(74%)	Y	400	178	(222)	(55%)	Anticipated lab testing shifted until later in the year due to delays in product availability. Some budget reallocated to other projects in forecast.
Total Water Heating	79	250	(171)	(68%)		490	408	(82)	(17%)	
Codes and Standards (Direct Expense)	181	190	(9)	(5%)	G	360	347	(13)	(4%)	
Market Intelligence (Direct Expense)	156	156	(1)	(0%)	G	313	308	(5)	(2%)	
Total Expense	1,864	2,546	(683)	(27%)		4,955	4,681	(275)	(6%)	
Impact of Variance: Disposition based on qualitative and quantitative assessment by NEEA Staff at time of reporting.										

As of June 2024	(\$Thousands)		Natural Gas Funding					
Primary Strategies (Direct Costs and Salary & Benefits)	YTD Actual (\$K)	YTD Budget (\$K)	Variance (\$K)	% Variance	Annual Budget (\$K)	Annual Forecast (\$K)	Variance (\$K)	% Variance
Emerging technology (Labor and G&A)	\$4	\$5	-\$1	-14%	\$10	\$9	-\$1	-7%
Emerging technology (Direct Expense)	\$73	\$450	-\$377	-84%	\$900	\$903	\$3	0%
Effective Portfolio Execution, Existing & New (Labor and G&A Expense)	\$582	\$619	-\$37	-6%	\$1,231	\$1,029	-\$203	-16%
Building Envelope (Direct Expense)	\$14	\$30	-\$16	-53%	\$51	\$43	-\$8	-15%
Consumer Products (Direct Expense)	\$0	\$0	\$0	0%	\$0	\$0	\$0	0%
HVAC (Direct Expense)	\$255	\$339	-\$84	-25%	\$587	\$606	\$19	3%
Lighting (Direct Expense)	\$0	\$0	\$0	0%	\$0	\$0	\$0	0%
Motor-Driven Systems (Direct Expense)	\$0	\$0	\$0	0%	\$0	\$0	\$0	0%
New Construction (Direct Expense)	\$0	\$0	\$0	0%	\$0	\$0	\$0	0%
Water Heating (Direct Expense)	\$79	\$250	-\$171	-68%	\$490	\$408	-\$82	-17%
Enabling Infrastructure (Direct Expense)	\$0	\$0	\$0	0%	\$0	\$0	\$0	0%
Total Effective Portfolio Execution	\$930	\$1,237	-\$308	-25%	\$2,359	\$2,086	-\$273	-12%
Codes & Standards (Labor and G&A)	\$25	\$26	-\$1	-5%	\$51	\$50	-\$1	-2%
Codes & Standards (Direct Expense)	\$181	\$190	-\$9	-5%	\$360	\$347	-\$13	-4%
Market Intelligence (Labor and G&A)	\$14	\$0	\$14	0%	\$0	\$14	\$14	0%
Market Intelligence (Direct Expense)	\$156	\$156	-\$1	0%	\$313	\$308	-\$5	-2%
Sub-total Core Program Activities	\$1,382	\$2,065	-\$683	-33%	\$3,992	\$3,718	-\$275	-7%
Convene and Collaborate (Labor and G&A)	\$0	\$0	\$0	0%	\$0	\$0	\$0	0%
Convene and Collaborate (Direct Expense)	\$0	\$0	\$0	0%	\$0	\$0	\$0	0%
Administration (Labor)	\$0	\$0	\$0	0%	\$0	\$0	\$0	0%
Administration (Direct Expense)	\$0	\$0	\$0	0%	\$0	\$0	\$0	0%
Allocate Shared Services(Bus Admin, IT, Facilities, Convene and Collaborate)	\$482	\$482	\$0	0%	\$963	\$963	\$0	0%
Sub-Total Shared Services	\$482	\$482	\$0	0%	\$963	\$963	\$0	0%
Total Activities	\$1,864	\$2,546	-\$683	-27%	\$4,955	\$4,681	-\$275	-6%