

Q4 2024: Tuesday, November 5

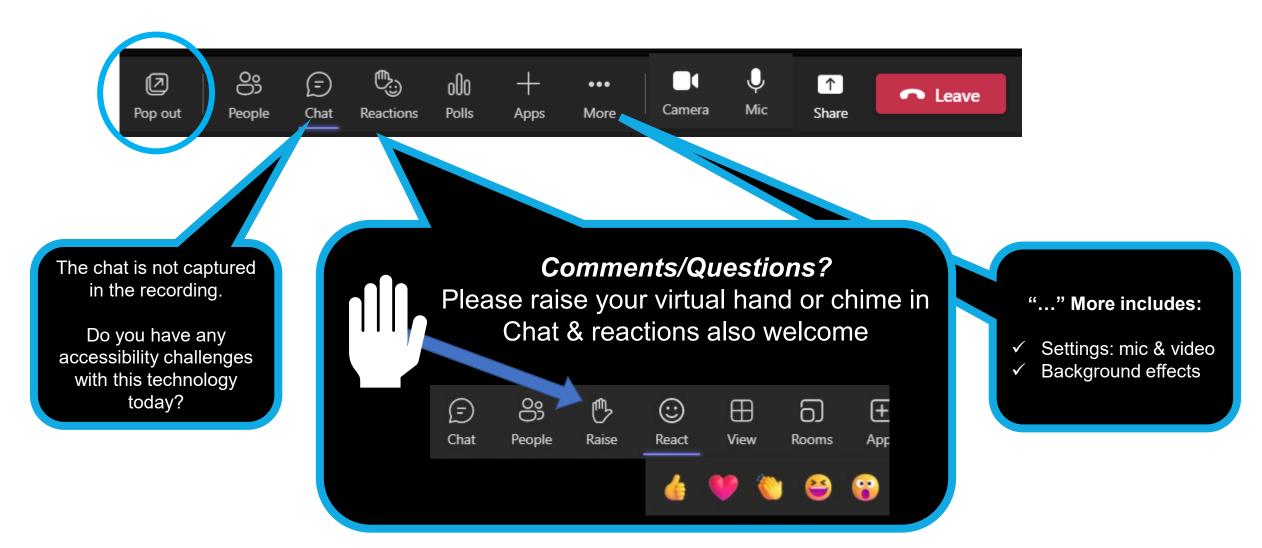
9:00am – 11:30am Pacific Virtual

Regional Portfolio Advisory Committee





Tools for Today: Engaging on Teams





Heads up:

"Spotlighting" Speakers





Reminder of Committee Purpose & Role



Purpose

advising on the optimal composition of NEEA's program portfolio, including a formal vote for program advancement at two key points in the Initiative Lifecycle, consistent with the goals and objectives of NEEA's Business & Operations Plans.



Responsibilities

- Portfolio optimization & program advancement (milestone votes)
- Coordinate downstream marketing (RPAC+)
- Oversee coordinating committees and workgroups
- Monitor outcomes of all advisory committees
- Advises NEEA's Executive Director on portfolio decisions



AgendaAll Times Pacific

9:00-9:05 Welcome & Agenda / Packet Review 9:05-10:15 **Introductions + RPAC Round Robin** 10 min **BREAK** 10:25-10:50 **Market Transformation Highlights: HVAC Data** 10:50-11:05 **RPAC Charter** 11:05-11:15 **Federal Funding Work Group Update** 11:15-11:25 **Housekeeping and Looking Ahead** 11:25-11:30 Wrap-Up & Adjourn

Packet Review & Informational Updates



- Tier 1: Agenda Items
 - ✓ Market Transformation Highlight: HVAC Data (pg. 3)
 - ✓ RPAC Charter Changes: Incorporating 3rd Milestone Vote (pg. 4)
 - ✓ Federal Funding Work Group Update (pg. 14)
- Tier 2: Informational Updates
 - ✓ NEEA Northwest (Online) Marketplace Update (pg. 15)
 - ✓ Q3/Q4 Committee Updates (pg. 16)
- Tier 3: Additional Resources (links on pg. 2)

Market Progress Report, committee materials (charters & recent meeting resources), functional newsletters (Market Research & Eval, Emerg Tech, Codes + Standards + New Construction)





WELCOME! New Committee Members

- Clay Monroe Pacific Power
- Emily Gilroy WUTC
- Bill Hibbs Clark PUD (effective Q1)





<u>Combined:</u> Introductions + Committee Roundtable

NEEA Staff & Guests

Introduction

Committee Members

- Introduction
- Roundtable share-out
 - Q4 Highlights on any of the following:
- Big changes (programs/personnel)
- Current challenges, lessons learned
- How utility activities relate to NEEA's
- Sharable tools/materials
- Equity, hard-to-reach markets
- Findings, filings, IRPs

- Name
- Organization
- And...

XXX







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Market Transformation Highlight: HVAC Data

Jackie Ostroff

Manager, Data Strategy and Planning

Debbie Driscoll

Sr. Market Transformation Manager

Nov 5, 2024



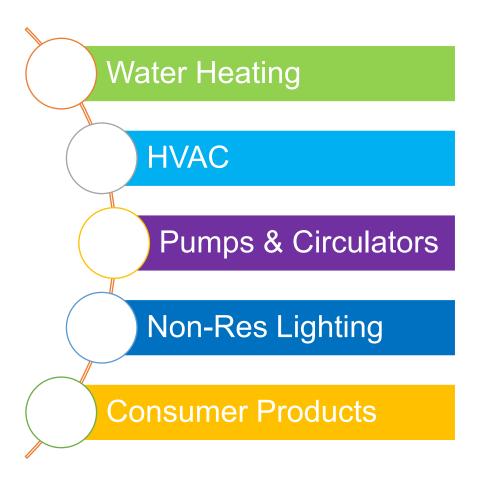
Data Driving Market Transformation





NEEA Full Category Sales Data

- ✓ More than efficient sales, all products sold
- ✓ Regional Representation
- ✓ Robust data that include key efficiency metrics and product attributes

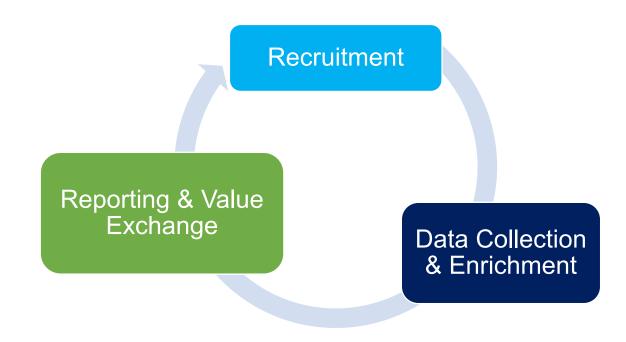






Successful Market Data Collection

- Relationships are key!
- Building a quality dataset is complex
- Drives Value for Internal & External Stakeholders





Market Data Value Products

"The data NEEA has is unique in the nation. Nobody outside of manufacturers has sales data that differentiates product performance."

MT Program
Strategic
Support

Tracking Market
Adoption and
Energy Savings

Personalized Market Actor Reporting

Market Snapshots



Success Story: HVAC Sales Data

- 2017: 5 DHP suppliers provided data
- 2023: 17 suppliers provided full category residential and commercial HVAC equipment data
- 40-70% of the market depending on technology
- Expanded tracking from basic efficiency information to future-looking metric like Cold Climate Capable and Low Load Efficient





NOVEMBER 2023

PREPARED BY:

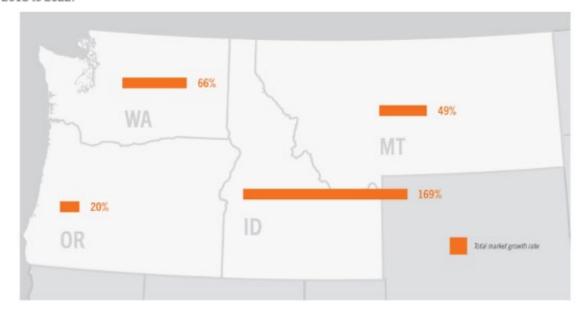
Northwest Energy Efficiency Alliance





STATE HEAT PUMP GROWTH RATE

Thanks to increased supplier participation in the survey in recent years, we can provide subregional growth rate information for heat pump sales. This chart shows the net growth rate of all heat pump sales (ducted ASHPs, DHPs, and VSHPs combined) of the total market. Heat pump sales growth rates are calculated as the percent change of total heat pump sales from 2018 to 2022.



RESIDENTIAL HVAC SAVINGS

HVAC efficiency has significant regional energy savings potential with substantial impacts for individual residences. Replacing zonal heat with a DHP typically saves about 1,700 kilowatt-hours (kWh) and \$190 annually, enough to power the average home for nearly two months. Similarly, replacing an electric furnace with an ASHP can save over 3,500 kWh and \$380 a year, shrinking the average home's energy consumption by a third.





Northwest HVAC Market Snapshot 2022



ASHPs and VSHPs

All centrally ducted heat pumps, both ASHPs and VSHPs, have continued to grow in market share. They now represent over a quarter of heating equipment sales (with similar representation in cooling equipment sales). As a reminder, ASHPs are defined in this report as including only single- and two-stage ducted split system units, whereas VSHPs are defined as ducted split-system units with variable-speed compressors. VSHPs have seen enormous

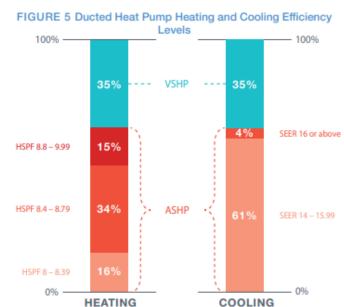
growth over the past few years and now account for 35% of all ducted heat pump units.

At the 2023 AHR Expo, one manufacturer commented that the biggest change they've seen in the Northwest is that now 35-40% of heat pump sales are inverter-driven, matching the collected sales data. The same representative said they forecast this percentage to rise in the next 5 years.

In 2022, VSHPs made up 35% of ducted heat pump sales

In 2022, federal regulations required split-system heat pumps to have a minimum heating efficiency of HSPF 8.2 and a minimum cooling efficiency of SEER 14.8 The majority of ducted heat pumps sold in 2022 were more efficient than

the existing mandatory requirements. As seen in Figure 5, only 16% were in the lowest efficiency tier that just met the federal minimum. Nearly half (49%) were a mid-tier ASHP with an HSPF between 8.4 and 9.99, and 35% were VSHP. Within the VSHP category are ranges of efficiency ratings - a majority of VSHP have HSPF values between 8.8 and 9.99 while some units have HSPF above 10. On the cooling side, 61% of ducted heat pumps were in the lowest tier, 4% of ducted heat pumps have a SEER rating of 16 or above, and 35% were VSHP. While there are many factors that affect energy use,9 modeling shows that an average VSHP consumes less energy than the highest HSPF tier of ASHPs (which are single- and two-stage).10



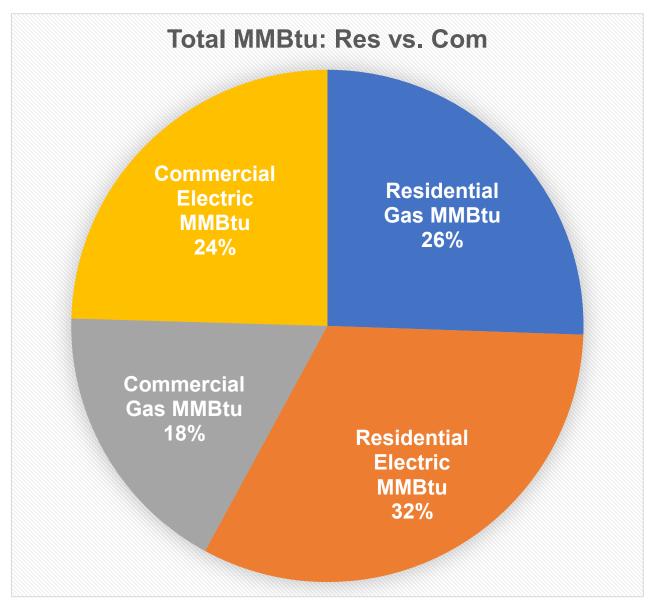
Ecosystem of HVAC data informs strategy







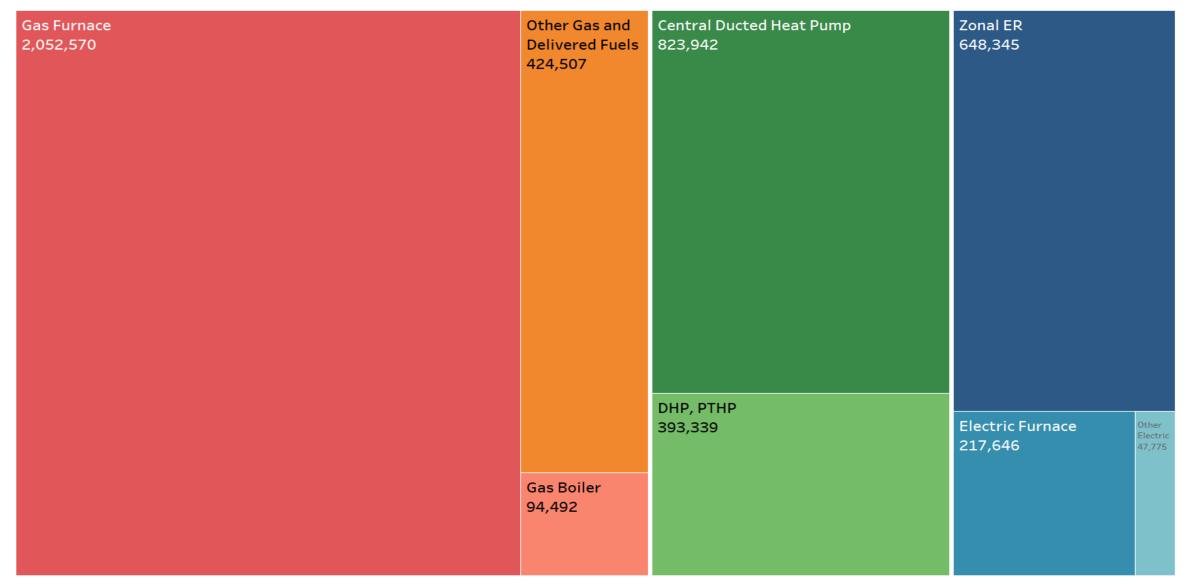
Regional HVAC Snapshot: Fairly equal distribution across major market segments



Source: CBSA 2019 and RBSA 2017



Residential HVAC stock: nearly 50% gas, HPs growing

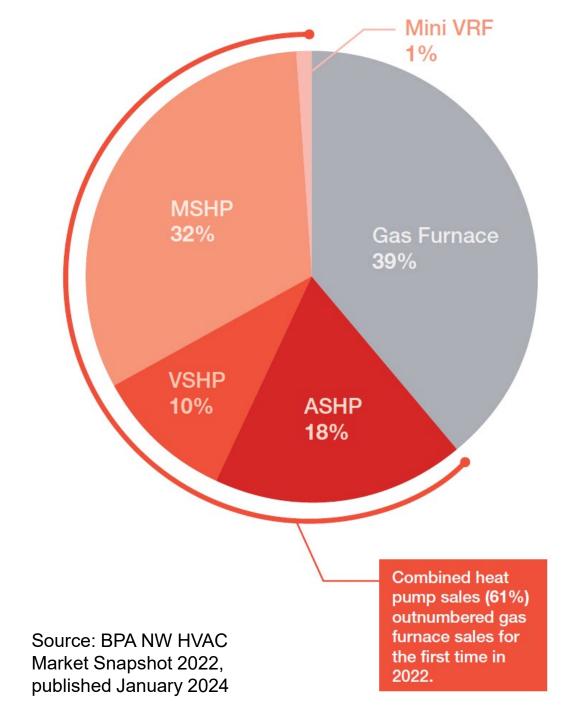


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Source: 2023 RBSA

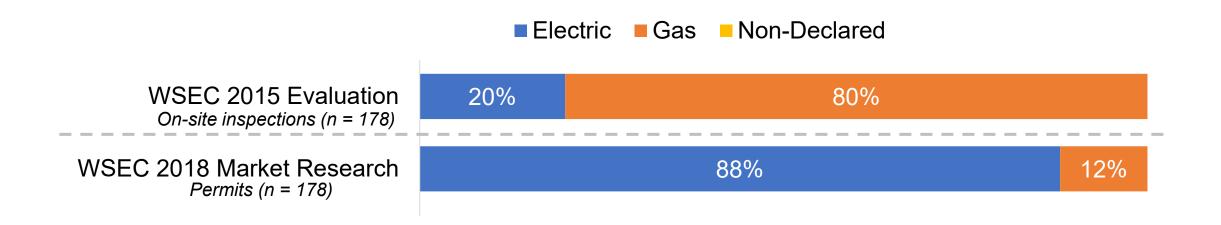


Combined heat pump sales outnumbered gas furnace sales for the first time in 2022





Washington code rapidly shifted primary space heating from gas to electric in new construction



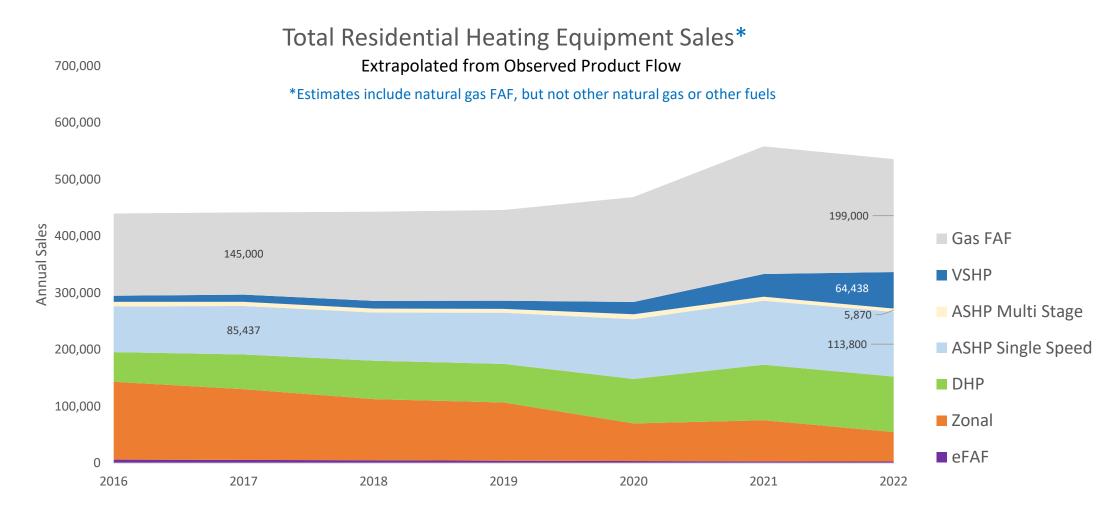
WSEC 2018 market research and evaluation studies used different samples

Source: Washington Residential Code Evaluations, 2015 and 2018





Residential HVAC Sales: Heat pumps growing at expense of zonal electric resistance and gas systems

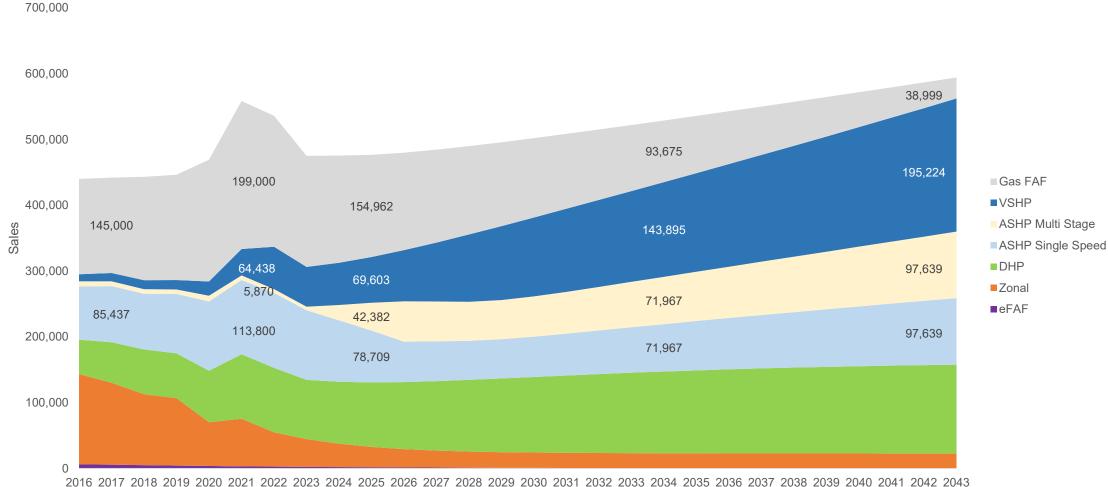






Residential HVAC sales forecast

Total Residential Heating Equipment Sales: High Electrification Scenario*



2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040 2041 2042 2043





SCENARIO CONTROLS		REFERENCE SCENARIOS				
		Current		Most Single	Fewest Single	
Scenario Control		Settings	Mid Case	Speed ASHPs	Speed ASHPs	
Fed Standard eliminates all ASHP but VSHP starting in 2035		No	No	No	Yes	
Tax Credit Revives 2 Speed ASHPs		No	Yes	No	Yes	
VSHP Natural Saturation %		50%	50%	40%	75%	
Electrification Scenario		Medium	Medium	High	Low	
ORECAST						
hart updates per Scenario Controls above						
700,000 Observed product 600,000	Total Resident Forecast product flow	ial Heating E	quipment	Sales* *	Estimates include n not other natura	atural gas FAF, but I gas or other fuels
500,000			131,436		108,236	■ Gas FAF ■ VSHP
400,000 145,000	163,442		125,016		160,610 8 033	ASHP Multi Stage

6,253

118,798

64,438 5,870

113,800

66,508

5,785

109,921

300,000

200,000

100,000

0

85,437



8,033

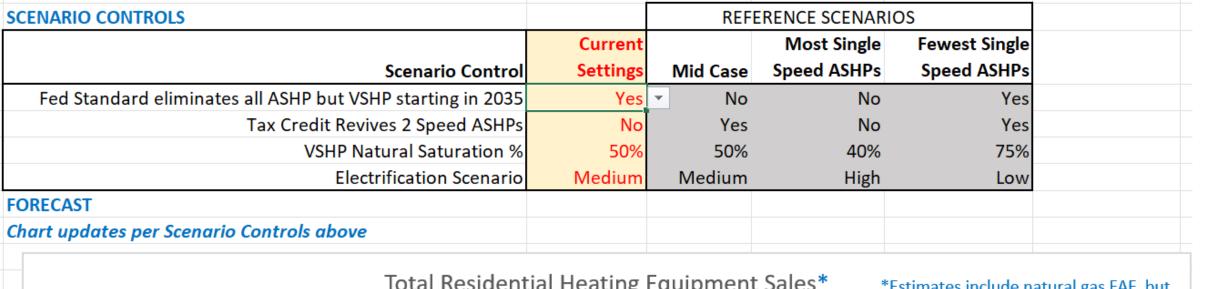
152,622

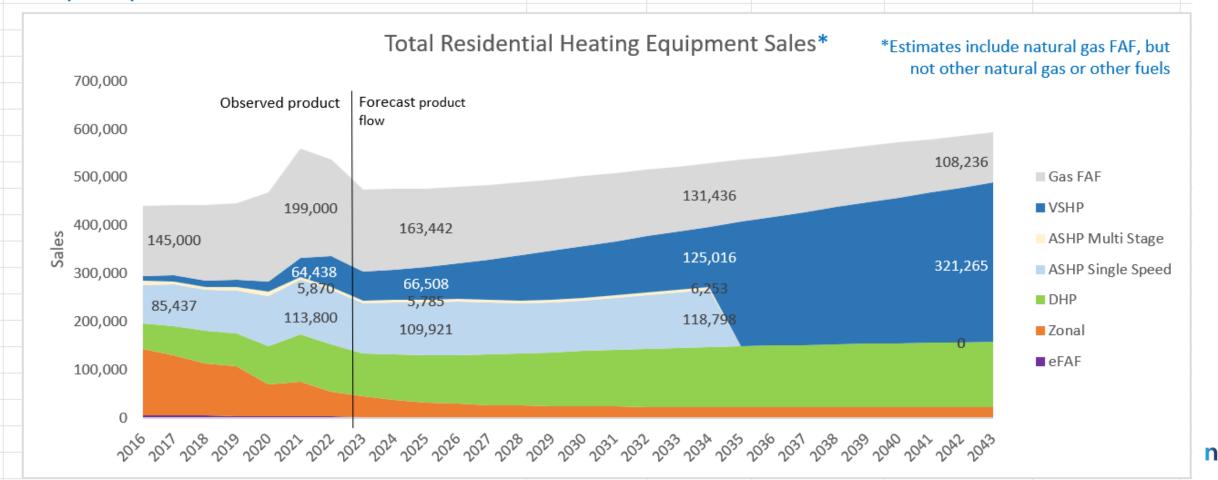
■ ASHP Single Speed

DHP

Zonal

■ eFAF







Thank You!



Jackie Ostroff

Manager, Data Strategy and Planning jostroff@neea.org

Debbie Driscoll

Sr. Market Transformation Manager ddriscoll@neea.org



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Memo: pg. 4

Charter: pg. 5-13



RPAC Charter: Proposed Changes & Work Group Refresher

Alisyn Maggiora

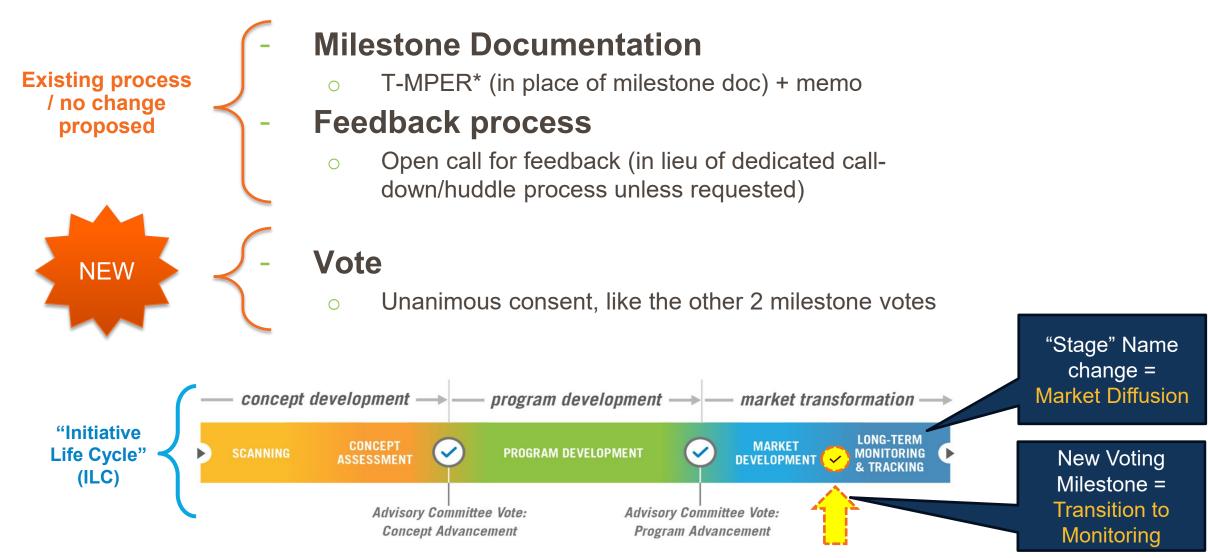
Sr. Stakeholder Relations Manager

November 5, 2024





Reminder: Proposed 3rd Vote @ Long-Term Monitoring & Tracking





Context: Why now?

- C7 Goal: Supports equitable delivery of MT efforts
- Increased transparency w/ 1off requests to stay in a local market
- Formalize RPAC voice in LTMT

RPAC Charter Review

Proposed Changes:

- 1. Pg. 5: Noted "three" key points where formal vote is taken with committee (previously two)
- 2. Pg. 6: Added "Transition to Monitoring" language (name of new 3rd milestone)
- 3. Pg. 9: Addendum A Added related timing for vote, and description of documentation to be provided at milestone.
- 4. Pg. 12: RPAC+ (Marketing) –
 Updated timing of NEEA
 marketing updates to "as
 needed" correction to align
 with updates made in 2025-29
 Business





Next Steps: Timing for charter changes





- Input from staff
- Tee-up w/ NGAC & RPAC







• RPAC & NGAC *recommend* charter changes to Board





Q1'25

 Board reviews/ approves charter changes



RPAC Charter Changes Q&A



Work Groups Refresher

Packet Charter:

pg. 7

- Formed / staffed as-needed
- Limited term
- Specific purpose (distinct from other committees/forums or roles)







RPAC: Federal Funding NGAC: Dual Fuel Product CEAC:
Dual Fuel
Measurement





Thank You!

Alisyn Maggiora

amaggiora@neea.org

Sr. Stakeholder Relations Manager































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Update: Federal Funding Work Group

Jonathan Belais

Policy Manager



Nov 5, 2024

Recap

Work Group Engagements 2/26/24 – General updates from state energy offices and work group discussion/share-out

9/25/23 – Home rebate programs – DOE presentation and work group share-out

8/23/23 – Workforce barriers and opportunities – DOE presentation and work group share-out

5/4/23 – Overview from US DOE, update and priority sharing from state energy offices and work group members





What's next



Home Energy Rebate Program **Implementation**

OR/WA applications approved ID/MT applications in progress



Stakeholder focus on direct coordination with state energy offices



Continued coordination with/between states energy offices, manufacturers, and other stakeholders



Possibility to reconvene as regional barriers/opportunities arise during implementation





Thank You!

Jonathan Belais

Policy Manager

jbelais@neea.org































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Housekeeping & Looking Ahead

- Northwest (Online) Marketplace Update
- 2025 Operations Planning Update
- Looking Ahead
 - Leadership in Energy Efficiency Awards (Dec 5)
 - Upcoming Meetings & Events



Northwest Online Marketplace

- Testing/scanning project (now through 2025)
 - Goal: collect data, understand consumer purchasing behavior
- Engagements to-date
 - Products Coordinating Committee & 1-on-1s
- Regional site to go live by end of year
- Next steps
 - Updates via packets (for now)
 - Follow-ups with utilities as requested (to discuss/demo/participate)





2025 Operations Plan Timeline



Oct. 10: Full draft plan sent to Board, RPAC & NGAC

Oct. 10 – Oct. 28: Feedback period for

Board and committee members

December 5:

Board vote on final Operations Plan



LEADERSHIP IN ENERGY EFFICIENCY AVARDS

Join us for the hybrid ceremony!

NEEA's Board and staff will recognize individuals and teams for their exemplary dedication and performance in energy efficiency during the NEEA Board Annual Meeting on **December 5.**

To RSVP* go to: neea.org/leadershipawards

*in-person attendees must RSVP by Nov. 20

10 YEARS

2025 "Final" RPAC Meeting Dates

1	Quarter	Day(s)	Date(s)	TIME	LOCATION	
	Q1	Tues	Feb 11	9-4	Virtual	
	Q2	Thurs	May 22	9-4	NEEA / Hybrid (day after EFX)	
	Q3	Wed**	Aug 20	9-4	Virtual	
	Q4	Mon	Nov 3	9-4	Virtual	

** NEW: Date change from Aug 19 to Aug 20





Other regional / industry events or announcements?









Action Items / Recap / Final Qs?



Meeting Feedback

- One thing you learned / appreciated?
- Opportunities for improvement?
- Would you like us to follow up with you on anything?





Public Comments?





Thank You!

That's a wrap RPAC! Until we meet again...

Q1 2025 (pending board approval): Tues Feb 11 (virtual)





























