



Products Coordinating Committee Meeting

Q3 2023

August 17, 2023

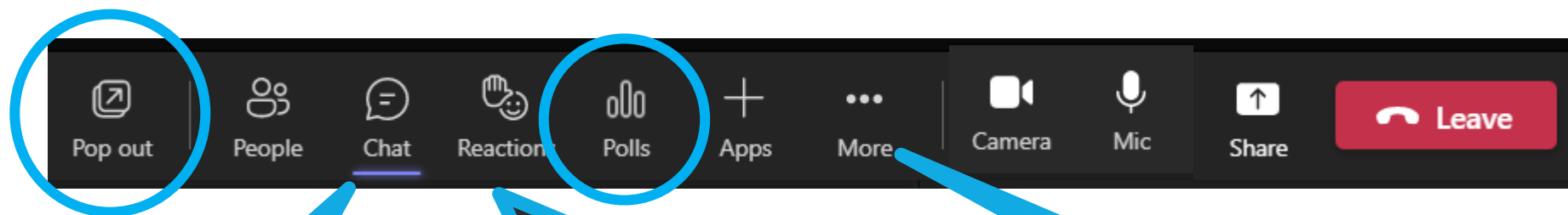
8:30am-12pm Pacific Time




neea



Tools for Today: Engaging on Teams

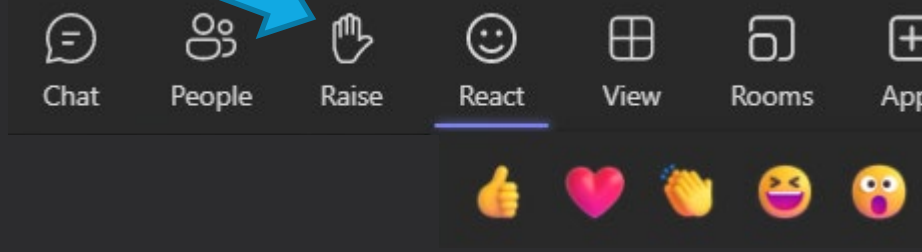


The chat is not captured in the recording.

Do you have any accessibility challenges with this technology today?

Comments/Questions?

Please raise your virtual hand or chime in
Chat & reactions also welcome



“...” More includes:

- ✓ Settings: mic & video
- ✓ Background effects

Agenda

(All times Pacific)



8:30-8:40	Welcome, Agenda & Packet Review
8:40-10:10	Introductions & Regional Roundtable
(10 min)	BREAK
10:20-10:30	Housekeeping
10:30-10:45	PCC Annual Workplan
10:45-11:55	<u>CONSUMER PRODUCTS REGIONAL PRIORITY TOPIC</u> Sales Data & Equity
11:55-12:00	Recap, Next Steps, Adjourn



Packet Review & Informational Updates (pg. 3)



- Tier 1: Agenda Focus Items
 - ✓ *2024 PCC Annual Planning Process (pg. 5)*
 - ✓ *Regional Priority Topic – Sales Data & Equity (pg. 7)*
- Tier 2: Informational Updates
 - ✓ *N/A*
- NEEA Program Activity Reports (Q2 + Q4 only)
 - ✓ *N/A*
- Tier 3: Additional Resources
 - ✓ *Recent committee materials, functional newsletters,*
 - ✓ *PCC Committee Charter, 2023 Annual Workplan*





Introductions + Committee Roundtable



Introduction Prompt *(All)*

- **Name**
- **Organization**
- *And...*

**Summer
highlight for you**



Roundtable Focus *(NEEA PMs & PCC members only please)*

- Organizational changes
- Program changes or updates
- Regional activities
- Coordination or leveraging opportunities
- Any questions/requests of your peers?

Please aim for 3-4 min max/pp, thanks!





Break!



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» **Housekeeping & Looking Ahead**

- RPAC Related:
 - Aug 29 Milestone Vote for Advanced Heat Pumps
(formerly Variable Speed Heat Pumps)
- Online Marketplace Update
- Operations planning Update
- Upcoming
 - Leadership in Energy Efficiency Awards
 - NEEA Meetings
 - Other events or announcements?





Regional Online Market – Next Steps

Overview:

PCC has a generally favorable view of online marketplace solutions. There may be potential of creating a “regional” marketplace supported by NEEA. Benefits of a “regional” solution may include:

- Staying engaged with customers on everyday purchases
- Reduced costs and opt-in functionality
- Greater leverage with market partners

Next steps:

Facilitate a discussion among interested stakeholders to understand utility needs . If interested in being part of this discussion reach out to Jon Clark JClark@neea.org or Alisyn Maggiora AMaggiora@neea.org by end of August.



2024 Operations Plan Timeline



Oct. 12: Full draft plan sent to Board, RPAC & NGAC

Oct. 12 – Nov 1: Feedback period for Board and committee members

December 5: Board vote on final 2024 Operations Plan





NEEA will recognize individuals and teams for their exemplary dedication and performance in energy efficiency during lunch on the first day of the NEEA Annual Board Meeting on December 4. We are asking for nominations in the following categories:

Rising Star
Innovative Collaboration
Lifetime Achievement

Aug 14
Through
Sept 15

Nominations open
now through Sept 15

Dec 04

Event Date

To nominate go to:
neea.org/leadershipawards



Upcoming NEEA Meetings

August

- August 24th – Cost Effectiveness and Evaluation Advisory Committee
- August 29th – Regional Portfolio Advisory Committee

September

- **September 12th – Q3 Board Meeting**
- September 21st – Regional Emerging Technology Advisory Committee

October

- October 26th – 2024 Draft Operations Plan Webinar

November

- November 1st – Cost Effectiveness and Evaluation Advisory Committee
- November 2nd – Regional Portfolio Advisory Committee
- November 6th & 7th – Integrated Systems Coordinating Committee
- **November 15th & 16th – Products Coordinating Committee**

December

- **December 5th – Q4 Board Meeting**
- December 14th – Regional Emerging Technology Advisory Committee

***Any Other Upcoming
Events?
Announcements?***



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PCC 2024 Annual Workplan

- Memo p.5, Workplan p.6 in packet
- Questions to Consider:
 1. Do you see value in the annual planning process as we've done it thus far?
 2. Should we use Mural again to discuss/develop new topics?
 3. Should we use part of the Q4 mtg, in lieu of a separate meeting?

*If “no” to any of these: **What other approach might you recommend?***





Q4 Topic Snapshot (if we use Q4 mtg)

Current Plan

Q4 2023 - Day 1 Nov 15, 1230-4 hold time (virtual)	Q4 2023 - Day 2 Nov 16, 8-1 hold time (virtual)
MOTOR-DRIVEN PRODUCTS (45 min) <u>[NEEA SHARE-OUT + REGIONAL DISCUSSION]</u> : Pumps + Circulators TOPIC C --> Role of VFD's + Smart Pumps - How to identify and capture midstream savings <i>Desired outcome:</i> TBD	WATER HEATING (45 min) <u>[NEEA SHARE-OUT + REGIONAL DISCUSSION]</u> : HPWH TOPIC C --> Multifamily - Coordination - Space constraints - Identifying in-unit solutions <i>Desired outcome:</i> TBD

Proposed Plan

Nov 15

VFDs +
Smart
Pumps

Water Heat
Multifamily

Roundtable

Nov 16

Annual
Planning



PCC 2024 Annual Workplan Proposed Structure Changes

1 half
day

Q1

- **Regional Priority topics**
- Roundtable
- Priority topic check-in

2 half
days

Q2

- **NEEA updates, reports**
- Roundtable
- Priority topic check-in

1 half
day

Q3

- **Regional Priority topics**
- Roundtable
- Priority topic check-in

2 half
days

Q4

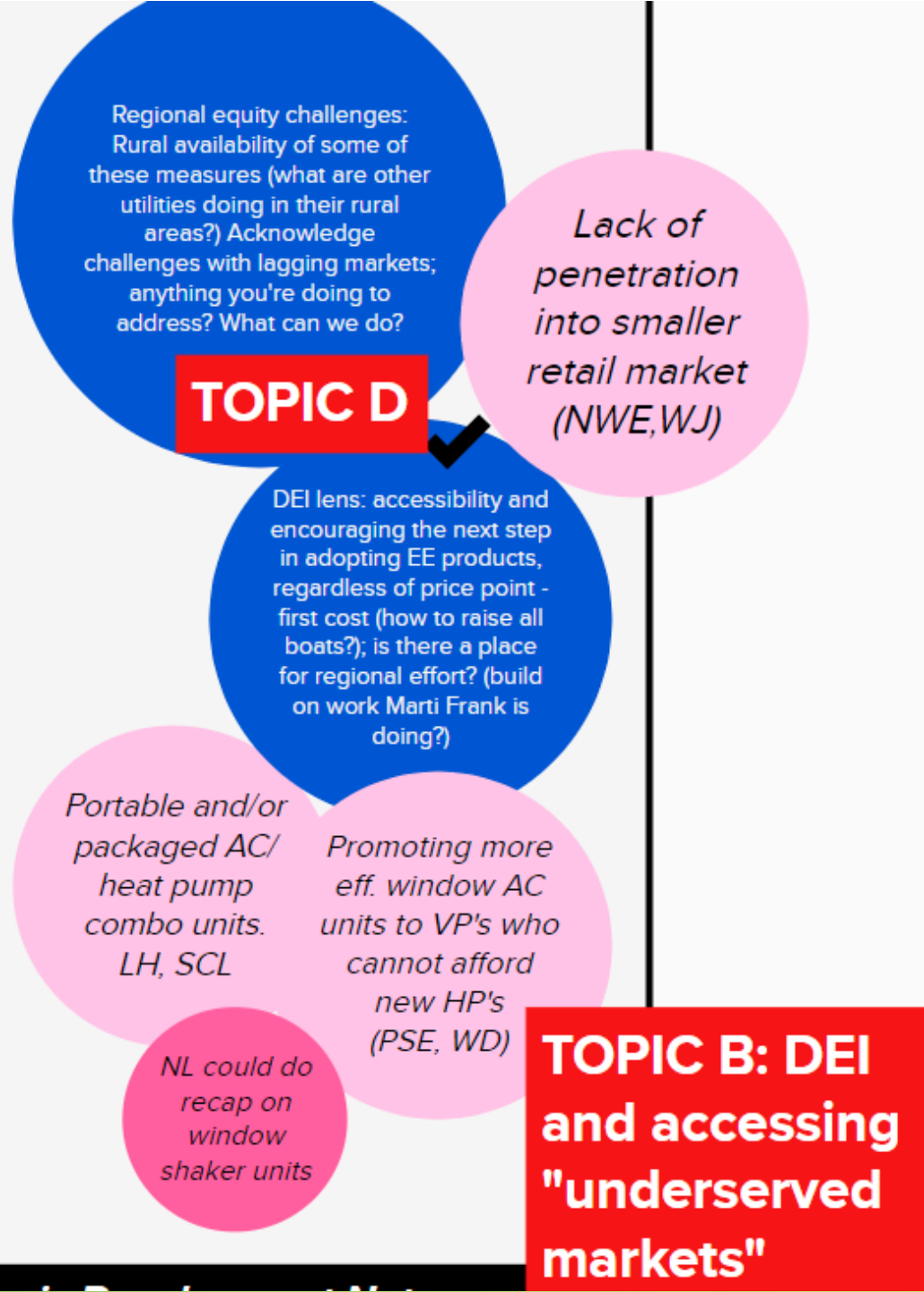
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REFERENCE ONLY:

Snip from 2023 Annual Planning board

Acknowledgements:

- Labels & definitions for “targeted consumer segments” (e.g. vulnerable, named) vary by stakeholder and state.
- Our organizations are all in different spaces on this; this is about listening and learning from each other today.



Retail Products Portfolio

Sales Data and Equity

Anne Brink

Program Manager, NEEA

August 17, 2023





Desired Outcome

- Committee members understand how Equity is being discussed/targeted around the region in utility programs, and explore how NEEA may be able to support those efforts where appropriate.



Topic Agenda

- 10:50 – 11:15 Stakeholder roundtable – sharing current and planned efforts to reach low income and/or underserved communities
- 11:15 – 11:35 RPP sales data – rural and urban
- 11:35 – 11:50 Window heat pumps
- 11:50 – 11:55 Next steps



Round Table Discussion

- What are you currently doing, or do you plan to do to ensure rural customers and/or low-income customers are benefitting from energy efficiency efforts driven by your organization?
- What other underserved communities are you targeting and how are you reaching them with your programs?
- What questions do you have of your peers on this topic? What questions do you have of NEEA?

EPA's Research on ENERGY STAR Appliance Affordability

- Findings presented March 2021 by the EPA
- Researched online product listings at Home Depot, Lowe's, Best Buy and Amazon
- Compared pricing of ENERGY STAR and non-ENERGY STAR product listings
- Identified target product categories

ENERGY STAR Affordability – Initial Targets

Product	Configuration
Clothes Washers	Top Load – Regular
Clothes Dryers	Electric – Regular
Room Air Cleaners	All Sizes
Room Air Conditioners	Small

Potential Strategies to address

- Bulk purchasing i.e. for low-income programs
- Manufacturer award addressing affordability i.e. Partner of the Year for Affordability
- Working with ESRPP on specific incentives targeted at reducing the price gap between ENERGY STAR and non-ENERGY STAR products.

Next Steps

- NEEA will be conducting a web scraping pilot on refrigerators, clothes washers and dryers to analyze product features and pricing of ENERGY STAR and non-ENERGY STAR products to update the EPA's research.
- After our findings we will work in conjunction with the EPA and ENERGY STAR Retail Products Platform partners on next steps.

Data, Data, Data!

Ryan Brown

Manager, Planning and Analysis



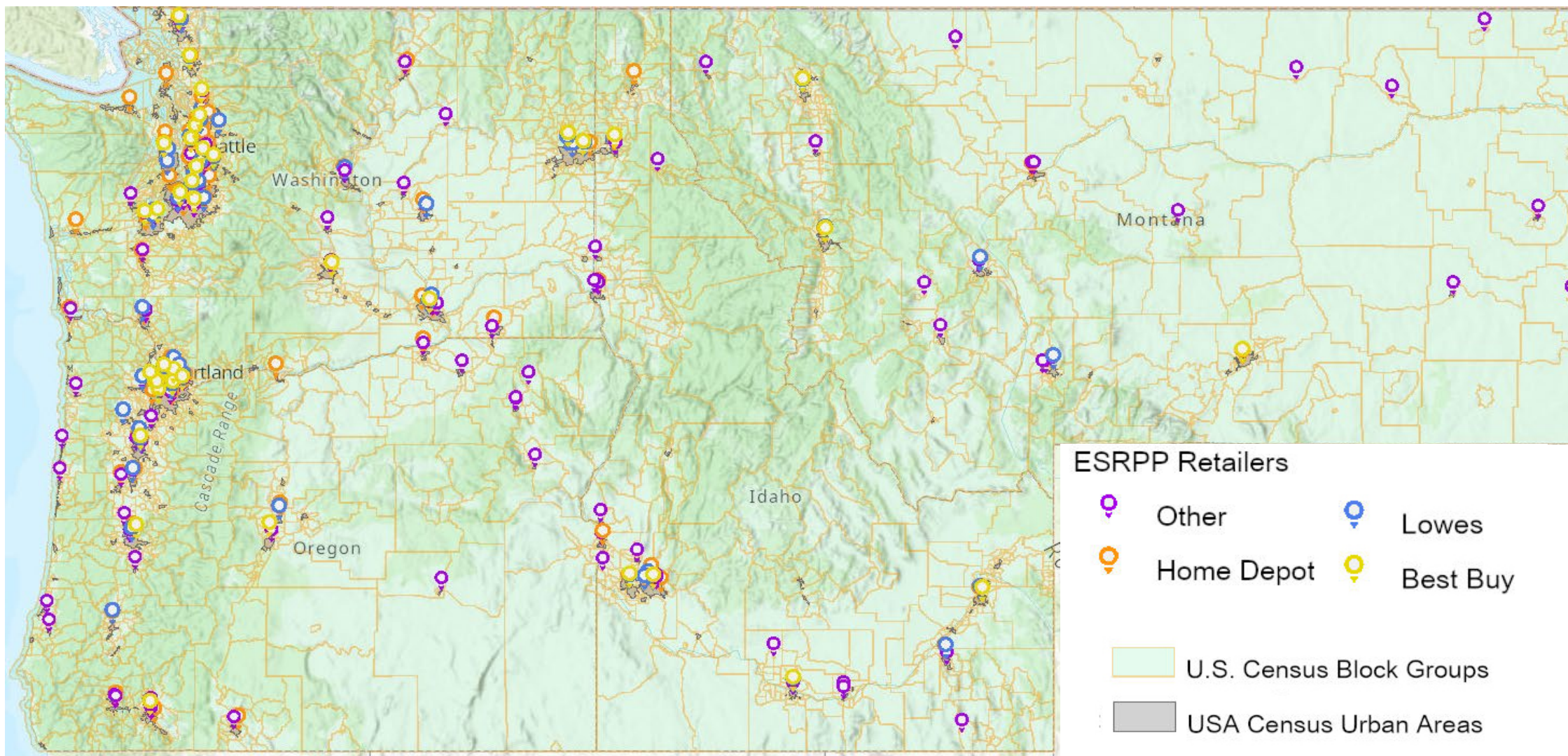
NEEA's RPP Program

Long-term objective: Manufacturers build energy efficiency into product designs for consumer goods

RPP Interventions
Emerging technology
Midstream incentives
Specification advancement
Standards
Measurement & compliance

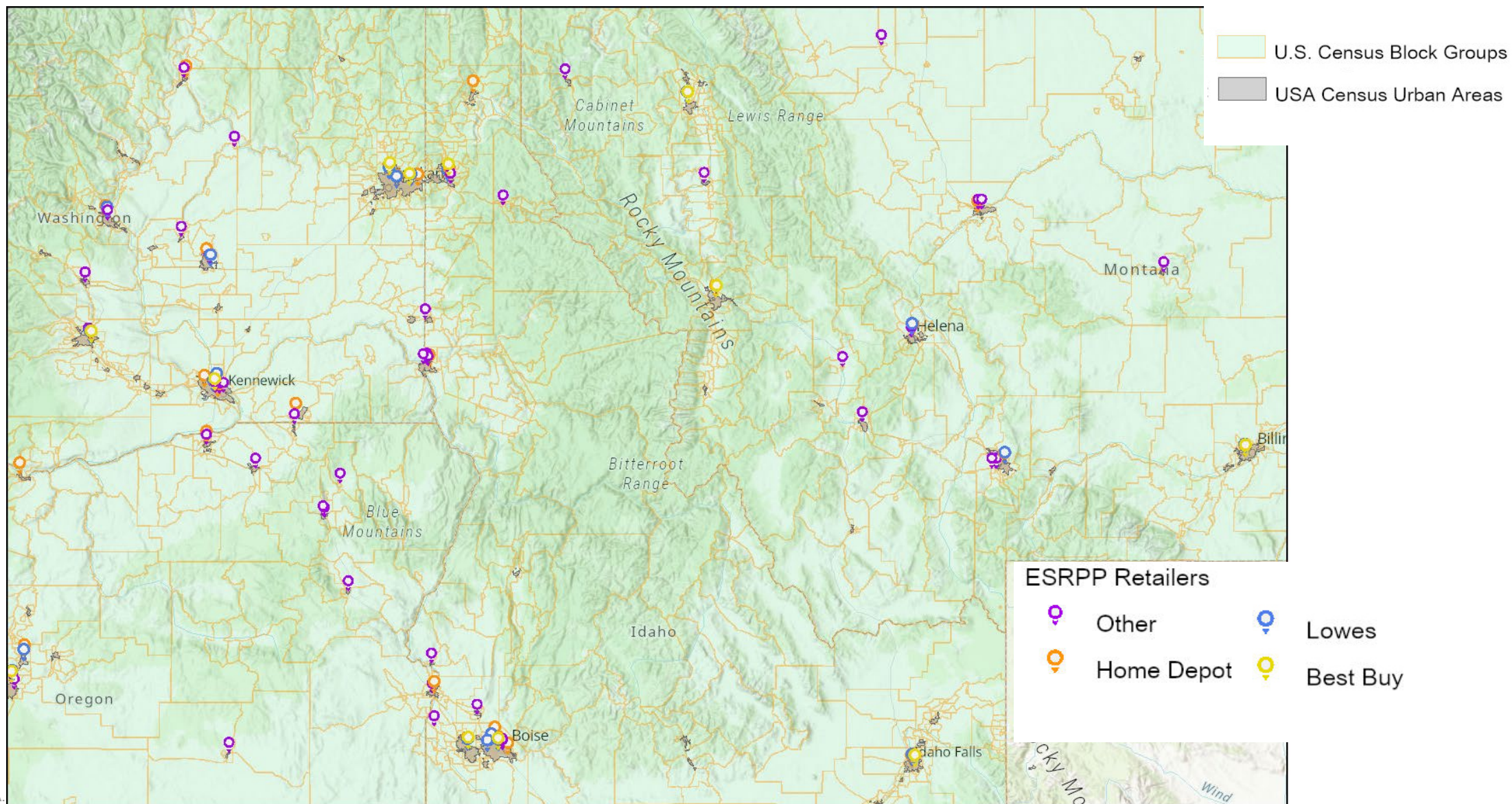


RPP Participating Stores: Region





RPP Participating Stores: Spokane/Boise/W Montana



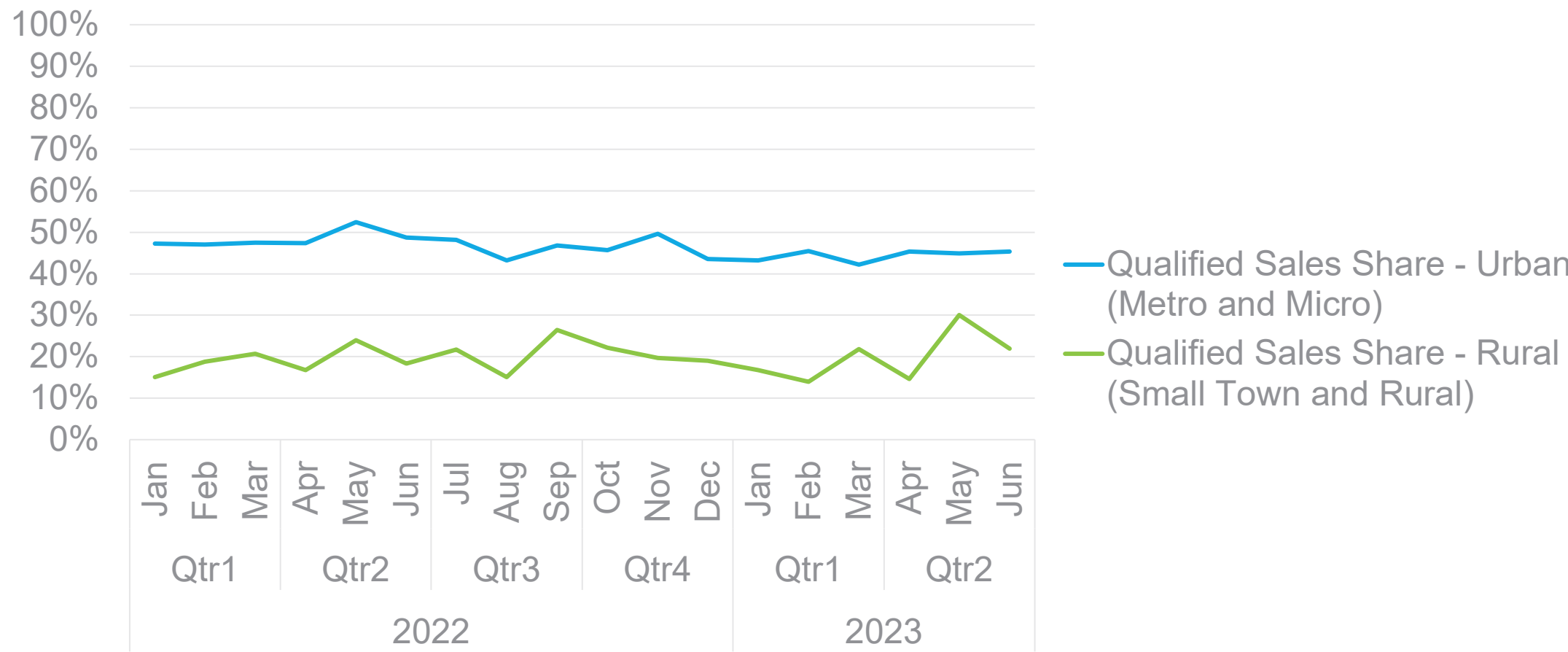


Urban/Rural Sales Data Analysis

- Early, exploratory analysis
- Point of sale data from ESRPP Participating retailers
- Mapped zip codes to [USDA Rural-Urban Commuting Areas](#)
 - Combination of Census and American Communities Survey data
 - Separates by Metropolitan, Micropolitan, Small Town and Rural
- Confidentiality requirements limits the granularity available in the dataset

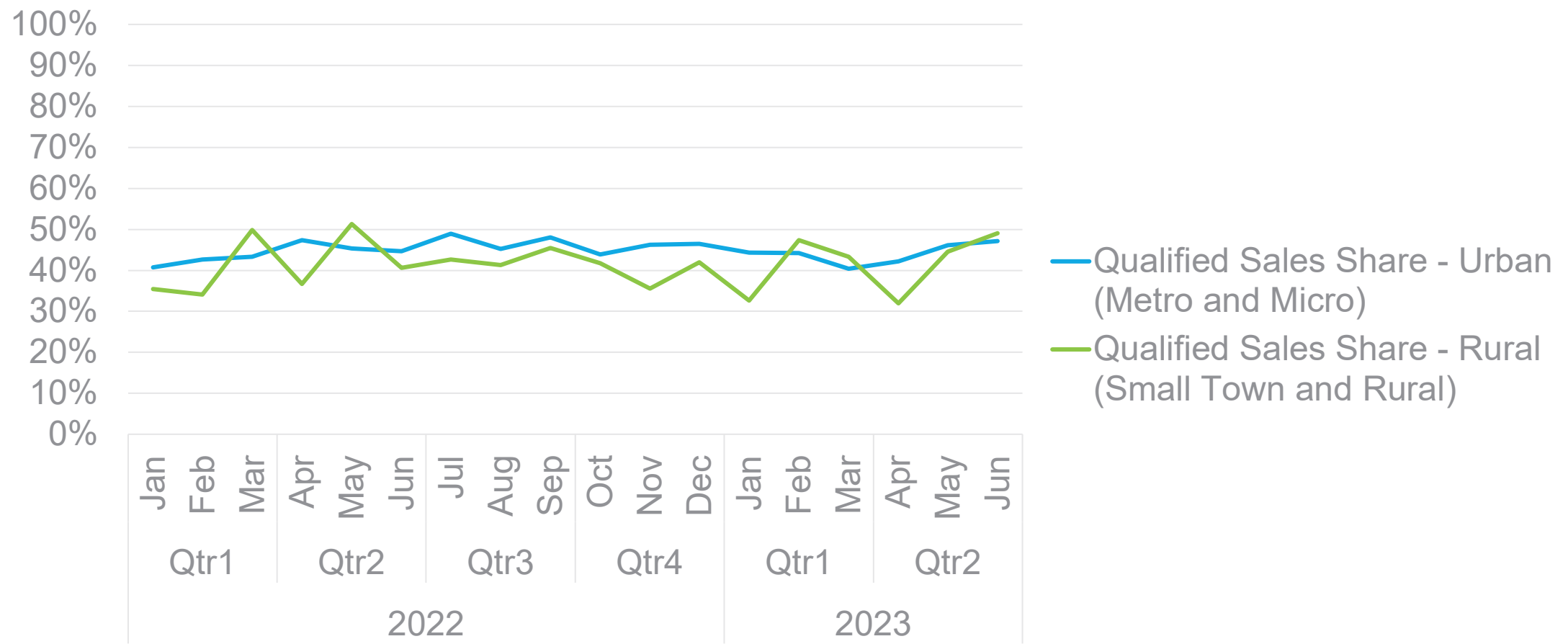


Clothes Washers Qualifying Sales Market Share





Clothes Dryers Qualifying Sales Market Share



Window A/Cs & Micro Heat Pumps

Christopher Dymond

Sr. Product Manager, Res HVAC



Window Air Conditioners and Heat Pumps

Christopher Dymond

Aug 17, 2023




neea

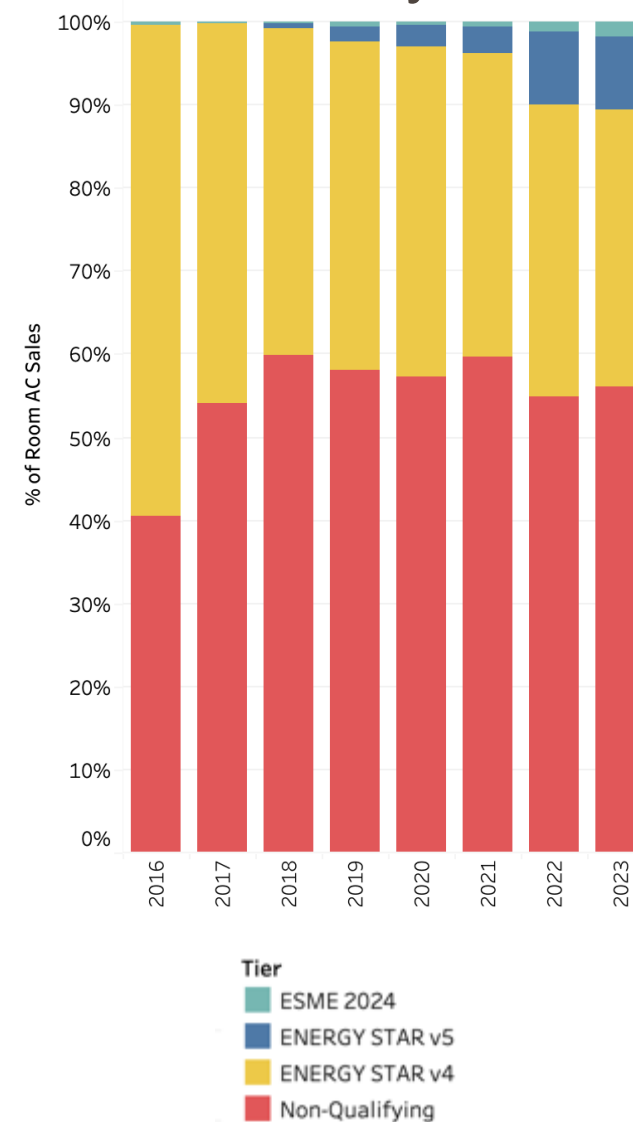


Window Heat Pumps

- Defined as Window AC with reverse cycle – mechanically very similar to window ACs
- Not well differentiated in the market
- Refrigerants shifting to lower GWP in 2025

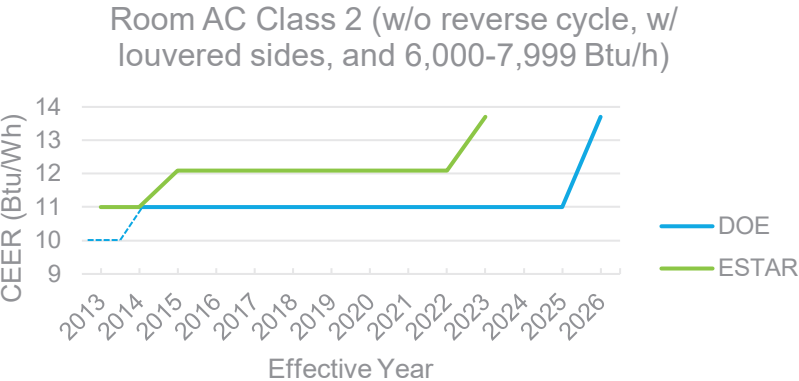


Market share of window ACs by efficiency level





DOE and EPA Room AC Criteria are Increasing



	CEER (Btu/Wh)							
	Class 1		Class 2		Class 3		Class 4	
Effective Year	DOE	ESTAR	DOE	ESTAR	DOE	ESTAR	DOE	ESTAR
2013		11		11		11.2		11.1
2014								
2015-2022		12.1		12.1		12		11.8
2023	11	13.1	11	13.7	10.9	14.7	10.7	14.4
2024								
2025		TBD		TBD		TBD		TBD
2026	13.1		13.7		16		16	



Window Heat Pumps Both Heat & Cool

(also called window AC w/ reverse cycle)

- Twice as efficient in heating than electric resistance

Window AC

w/reverse cycle



Portable
(dual hose)

Dual hose is very important to performance

Saddlebag



U-shape not yet sold as heat pump



Window Heat Pump Climate Categories

Category	Heating Range (outdoor Temp)	Defrost	Notes
AC with Electric Heater	5 - 75°F	-	Inefficient during heating
AC with Heat Pump	40 - 75°F	NO	Very limited heating range
Mild Climate Heat Pump	17 - 75°F	YES	Very limited availability
Cold Climate Heat Pump	5 - 75°F	YES	Not available until 2024+

Currently there is **NO** seasonal efficiency rating for window heat pumps. Consequently, they do not qualify for a 30% federal heat pump tax credit



2023 NEEA Micro HP Research

1. Understand the customer experience installing, operating and their expectations of what a window heat pump is and does.
2. Understand, installation, noise, and any mechanical limitations that may impact performance or customer experience.
3. Understand how users changed behavior such that the window HP displaced heating and cooling from preexisting sources.

Aug 1 - Product Council Presentation Recording
[Northwest Energy Efficiency Alliance \(NEEA\) | Product Council](#)





Research Phases

- Phase 1 – CUSTOMER PERSPECTIVE
 - 36 participants drawn from pool of Northwest centric Market Research Online Community
 - Use social media research tool to develop initial understanding of perceptions, current practice and candidate information
- Phase 2 - HOME USE TEST
 - 12 Participants will receive a micro HP
 - Install supply air temp and power data loggers
 - 6 activities to capture installation experience



Phase 1 Findings

- Energy and Comfort top priorities
(Note - efficiency was not top priority once installed)
- Customers already use multiple products to heat and cool their homes – most are familiar with portable products
- 72% completely agree the concept of a dual heat/cool window unit is appealing
- Portability and 120V outlet compatibility drive interest
- Intended use will likely be to improve comfort in rooms or areas not currently well served by existing heating system

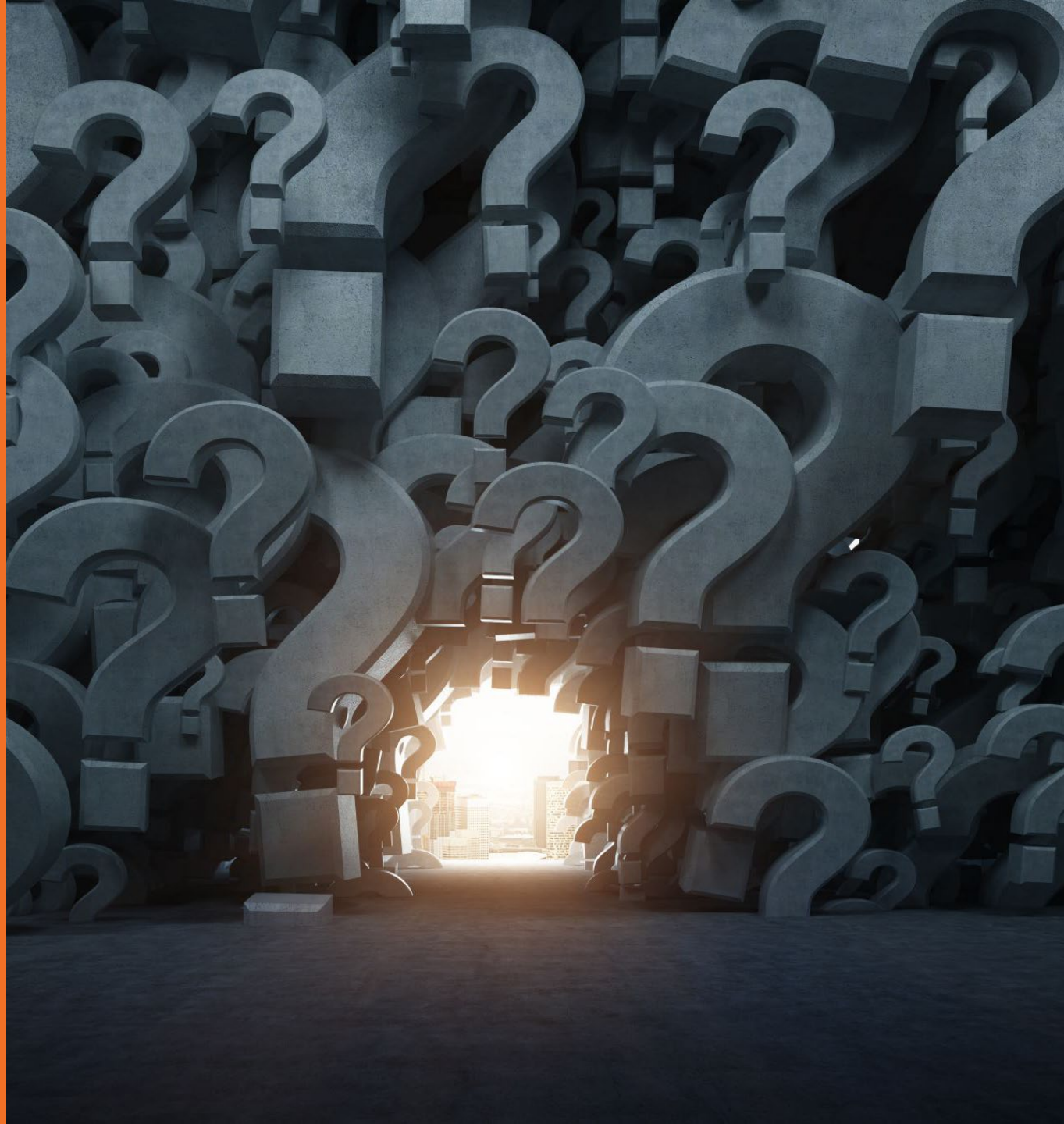


Field Test Observations

- Most participants were at least somewhat satisfied across all attributes . Participants were most satisfied with the ease of use , followed by overall heating performance , then noise level
- Units worked as expected
- Although installation was considered easy overall, there were some issues
- Once instructed, participants used product for primary heat in space, but w/o guidance they didn't.
- Potential deal breakers : 40F limit, aesthetics, physical barriers, noise level



Questions and Discussion





Energy and Comfort Top Priorities

Factors Total (n=36)	Not at all important	Somewhat important	Very important
Saving on energy costs	0% (0)	11% (4)	89% (32)
Being more energy efficient	0% (0)	22% (8)	78% (28)
Having my home at a temperature that is comfortable	0% (0)	25% (9)	75% (27)
How easy it is to heat or cool my home to my liking	6% (2)	28% (10)	67% (24)
Low or no cost installation of a heating or cooling system	6% (2)	33% (12)	61% (22)
Heating or cooling my entire home	8% (3)	33% (12)	58% (21)
How heating and cooling my home impacts climate change	25% (9)	33% (12)	42% (15)
Having the ability to program the heating or cooling temperatures at specific times of day	28% (10)	31% (11)	42% (15)
Heating or cooling only the rooms I spend the most time in	11% (4)	50% (18)	39% (14)
How much noise the heating or cooling system/device(s) make	11% (4)	64% (23)	25% (9)
Having the ability to heat and/or cool my home remotely with an app	58% (21)	36% (13)	6% (2)

Topic Wrap up!

» **Anne Brink** **Ryan Brown** **Christopher Dymond**

RPP Program Manager

ABrink@neea.org

Manager, Planning & Analysis

RBrown@neea.org

Sr. Product Manager, Residential HVAC

CDymond@neea.org





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A piece of brown paper with a string tied in a bow. The string is a light brown, twisted cord. It is tied in a bow that is centered on the right side of the paper. The bow has two loops, one pointing upwards and one pointing downwards. The string extends horizontally across the middle of the paper, and then vertically down the right side. The background is a solid, textured brown paper.

Let's wrap it up!

» Let's hear it!

Add to the chat:

*What's one key
takeaway for you this
quarter?*





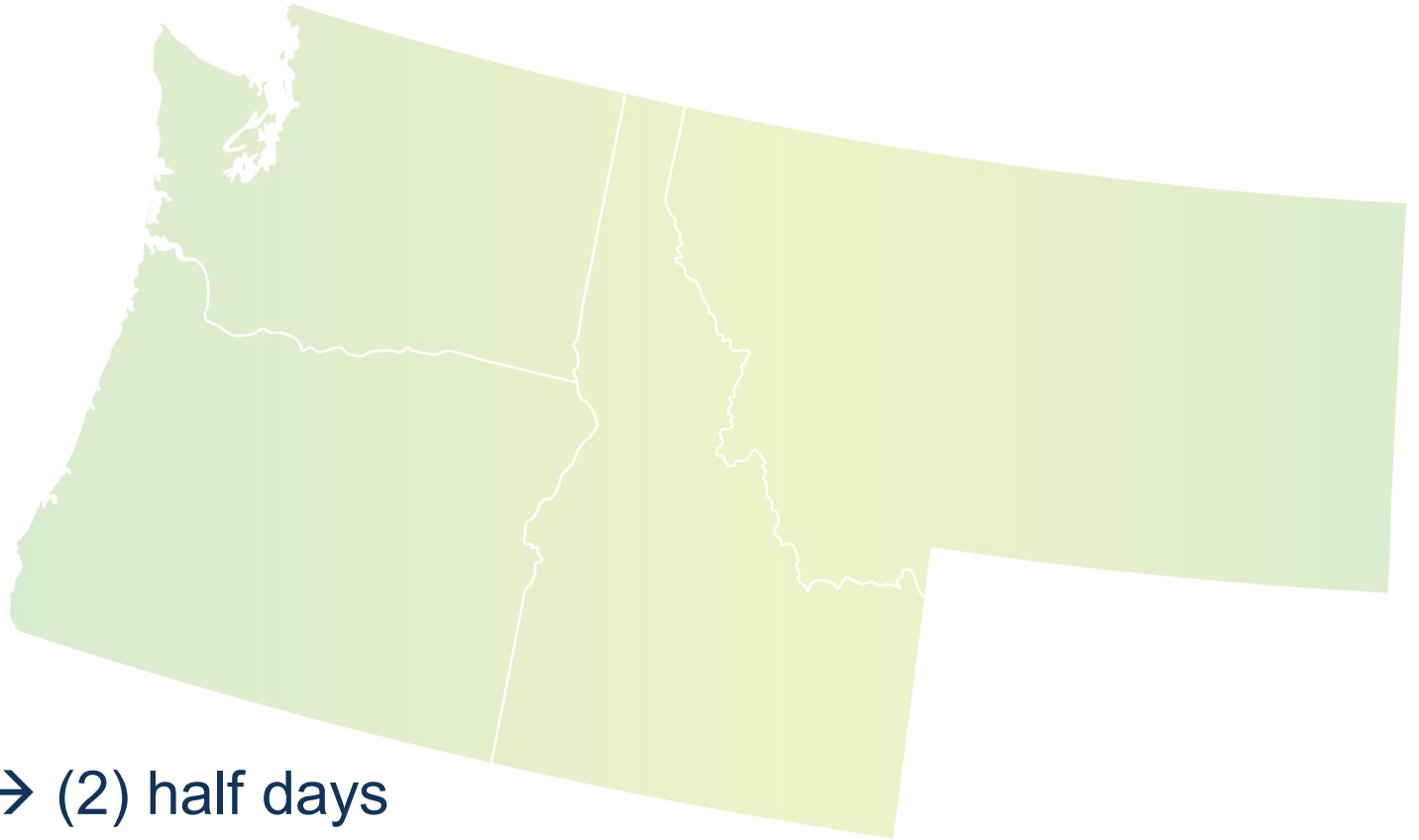
Action Items



Public Comment?



Thank you, PCC!



Next Meeting:

Q4: November 15 + 16, 2023 → (2) half days

