

Integrated Systems Coordinating Committee

Q4 2023 Meeting

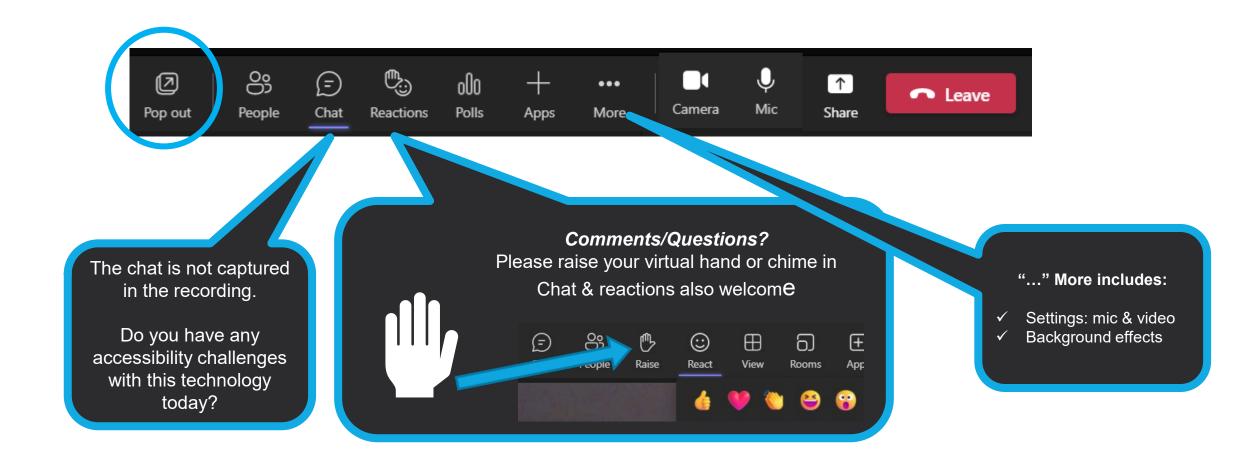
DAY 1 MONDAY, NOVEMBER 6TH, **2023**12:30 PM – 4:15 PM

DAY 2 TUESDAY, NOVEMBER 7TH **2023**9:15 AM – 12:00 PM





Tools for Today: Engaging on Teams



AGENDA DAY 1

12:30 – 1:20 pm	Welcome, Agenda, Introductions, Packet Review, Housekeeping,	
1:20 – 1:30 pm	Annual Planning Check in	
1:30 – 2:05 pm	Topic Advanced Heat Pumps	
2:05 – 2:15 pm	BREAK	
2:15 – 3:30 pm	Regional Roundtable	
3:30 – 3:35 pm	BREAK	
3:35 – 4:05 pm	Topic High-Perf HVAC	
4:05 – 4:15 pm	Recap, Next Steps, Adjourn	





- Name
- Organization,
- And.....





PACKET REVIEW & INFORMATIONAL UPDATES

- Tier 1: Agenda Focus Items
 - ✓ Topic Advanced Heat Pump (p.5)
 - ✓ Topic High-Perf HVAC (p.6)
 - ✓ Annual Planning session memo (p.7)
- Tier 2: Informational Updates
 - ✓ Program switch memo (p.8)
- NEEA Program Activity Reports (Q2 + Q4 only)
 - √ High-Performance Windows (p.11-14)
 - √ High-Performance HVAC (p.15-18)
 - ✓ Luminaire Level Lighting Controls (p.19-23)
 - √ Advanced Heat Pumps (p.24-27)
 - ✓ Better Bricks (p.28-31)
- Tier 3: Additional Resources (p.3)
 - ✓ Recent committee materials, functional newsletters,



HOUSEKEEPING

Announcements

- Upcoming NEEA committee meetings
- Leadership in Energy Efficiency
 Awards
- Efficiency Exchange 2024
- Stakeholder Satisfaction Survey:
 January 2024
- 2024 ISCC Meeting Dates



UPCOMING NEEA MEETINGS

November

 November 15th & 16th – Products Coordinating Committee (PCC)

December

- December 5th Q4 Board Meeting
- December 14th Regional Emerging Technology Advisory Committee (RETAC)





>> 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 4.

Rising Star Innovative Collaboration Lifetime Achievement

To RSVP* go to: neea.org/leadershipawards

*in-person attendees must RSVP by Nov. 17

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Efficiency Exchange Conference 2024



Save the Date May 14-15, 2024 Coeur d'Alene, Idaho

For more information:

www.neea.org/EFX



Q1-Q2 Stakeholder Engagement Activities



Stakeholder Satisfaction Survey

- Launch = Jan 16, 2024
- Focus = NEEA value, forums, processes
- Sent every 2-3 years
- Encourage individual responses



In-Person Stakeholder Visits

- Expected timing = Mar / Apr
- Discuss results of survey
- General marketing needs/alignment
- Socialize C7 business plan





2024 MEETING DATES



Q1

 29th February 2024, Thursday Q2

Day 1: 22nd May
Day 2: 23rd May

Wednesday/Thursday

Q3

• 15th August, Thursday

Q4

- Day 1: 6th November
- Day 2: 7th November Wednesday/Thursday



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Tomorrow! ISCC Annual Topic Planning

- Time: 9:15 ? (NLT Noon)
- Mural platform (visual guide only for discussion)
- Focus = topic development (review/discuss topic survey results)





Coordinating Committees Update: Program Swap

Residential Focused Committee members

Products

Facilitator: Alisyn Maggiora

Residential Programs

Consumer Products
Retail Products
Portfolio

Water Heating
Heat Pump Water
Heaters

Commercial &/or Industrial Programs

Motor-Driven Products

XMP Pumps

Efficient Fans

C&I Focused Committee members

Integrated Systems

Facilitator: Anouksha Gardner

Residential Programs

HVAC

Advanced Heat Pumps

Envelope

High-Performance Windows

Commercial &/or Industrial Programs

Lighting
Luminaire Level
Lighting Controls

HVAC

High-Performance HVAC

Proposed Structure: 2024 +

Products

Facilitator: Anouksha Gardner

Residential Programs

Consumer Products

Retail Products
Portfolio

Water Heating

Heat Pump Water Heaters

HVAC

Advanced Heat Pumps

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High-Performance Windows

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Facilitator: Anouksha Gardner

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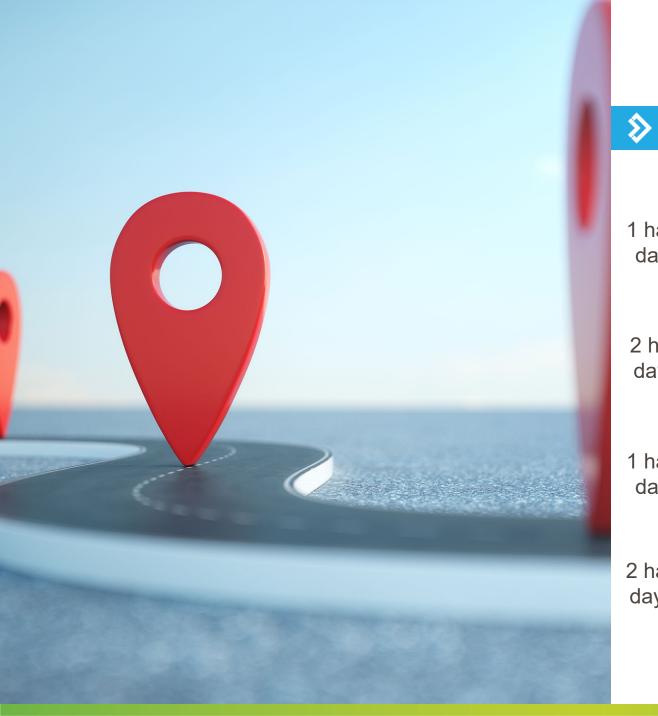
High-Performance HVAC

Motor-Driven Products

XMP Pumps

Efficient Fans

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PCC 2024 Annual Workplan **Proposed Structure Changes**



Any Other Upcoming Events? Announcements?



Advanced Heat Pumps

Program updates post RPAC Vote, Stakeholder input updates, and 2024 planned program activities

Suzi Asmus, Sr. Program Manager sasmus@neea.org



Topic Review: Advanced Heat Pumps



Market Transformation Approach

Promote existing, cost-effective improvements in all residential heat pumps

Locking in improvements by influencing specifications and federal standards

Resulting in continuous improvement in the average installed efficiency and increased peak savings



Why this approach?

- Leverage heat pump market momentum towards efficiency
- Address barriers where NEEA has a unique role to play
- Build greater efficiency into out-of-the-box systems over time with little to no incremental cost



Heat Pump Promotion Goes Mainstream

WSJ https://www.wsj.com > articles > heat-pump-energy-bill-gas-furnaces-11666364907

Will a Heat Pump Save Money on Your Energy Bill This

Oct 24, 2022 · Photo Illustration by Chaya Howell/The Wall Street Journal, iStoc

CR https://www.consumerreports.org > appliances > heat-pumps > buying-quide

Best Heat Pump Buying Guide - Consumer Reports

May 26, 2022 - Consumer Reports members can also view our heat pump ratings for the most reliable brands of ducted heat pumps and the brands with the highest owner satisfaction. Our ratings include

A https://www.aarp.org > home-family > your-home > info-2023 > heat-pump-quide.html

Heat Pumps Can Keep Your Home Warm and Cool. Should https://www.npr.org > 2023 > 04 > 01 > 1166267716 > 6-things-to-know-about-heat-pumps-a-climate

6 things to know about heat pumps, a climate solution in a box

Apr 1, 2023 - An IRS spokesperson tells NPR that the new credits can translate to up to \$2000 for

tttps://www.nytimes.com > 2021 > 06 > 30 > climate > heat-pumps-clim

Are 'Heat Pumps' the Answer to Heat Waves? Some efficient heat pumps bought after January 1, 2023. If you buy a new heat pump, Nadel says to keep

Jun 30, 2021 · Some Cities Think So. Electric heat pumps are a way to cool and heat homes at a much lower carbon cost than traditional air-conditioners and furnaces. 230. Installing

https://www.bloomberg.com > news > articles > 2022-12-27 > five-questions-to-ask-before-you-bu...

<u>Five Questions to Ask Before You Buy a Heat Pump - Bloomberg</u>

Dec 27, 2022 - December 27, 2022 at 1:00 AM PST Listen 5:01 Heat pumps are one of the most effective ways to shrink your home's carbon footprint and your utility bills at a time of rising electricity

Heat pumps: The super-efficient appliance that could save

https://www.cnn.com > 2022 > 09 > 16 > us > heat-pumps-energy-costs-lbq-climate

Sep 16, 2022 . The cost of heating oil in Maine has steadily risen from around \$1 per gallon in 2008 to more than \$4.50 per gallon in 2022. The UK will give homeowners \$7,000 to buy heat pumps. But what are they ...

https://www.thequardian.com > us-news > 2023 > mar > 11 > heat-pump-revolution-what-you-need...

The heat pump revolution is here. This is what you need to know

Mar 11, 2023 - In the US, the Inflation Reduction Act includes tax credits that cover 30% of the cost of a heat pump up to \$2,000 (about £1,700). For households with under 80% of the median area income, the law ...



Market Barriers & Opportunities

Barriers

Lack of awareness of energy efficient improvements and their value propositions

Lack of product differentiation for improvements that impact efficiency and capacity

Opportunities

Increasing end user demand, incentives and requirements for IAQ, Decarbonization and Cooling (AC)

Many other programs/orgs investing and incenting HPs for efficiency, decarb and capacity

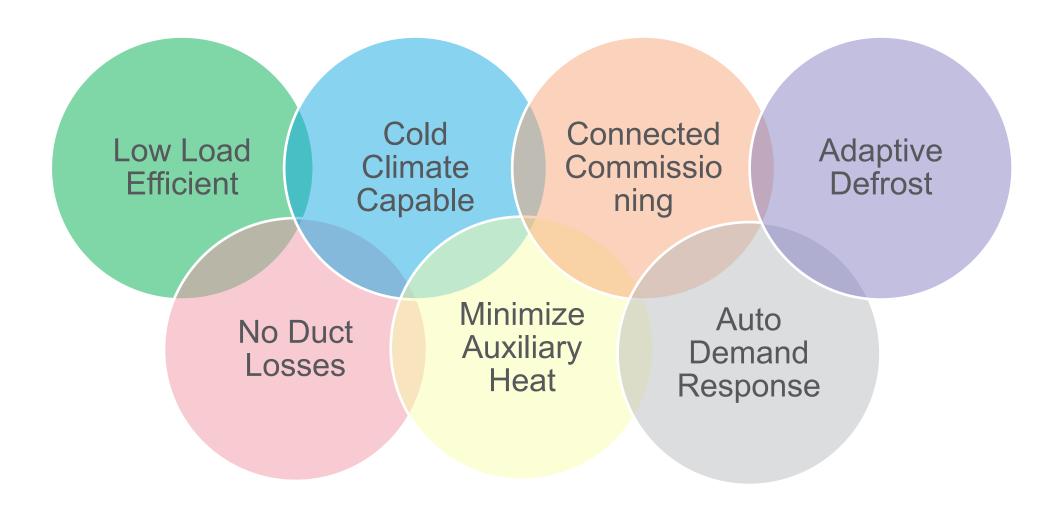
Spec updates enable manufacturers to differentiate more efficient products for competitive advantage



Market Transformation Vision



Improvements





Intervention Approach



Make qualifying products for each improvement identifiable in the market



Build adoption among manufacturers and efficiency program partners



Influence specification and standards bodies to include improvements



Regional Collaboration

NEEA

Engage and influence:

- Manufacturers
- Specification and Standards bodies
- National and bi-national efficiency organizations
- National HVAC and heat pump leaders and subject matter experts
- Partner on and share results of field research, pilots, case studies
- Support RTF measure development

Local **Programs**

Reference Improvement specifications with

- **Program** Requirements
- **Trade ally training**
- **Customer education**



General Themes from RPAC Members

- How do we mitigate the back-up/auxiliary/electric resistance heat problem?
- Contractor training is still needed for the other pieces of the savings pie: better sizing, installation, back-up heat - today
- Why do we expect manufacturers will expand availability of these improvements?
- How does the program approach benefit rural or lagging markets?
- Will these improvements need broader alignment with other regions outside the Northwest?
- How is NEEA prioritizing the improvements?



What's Next?

Advanced Heat Pumps Move to PCC



Reference Slides



Program Development

Activities	What We Learned
Expand market understanding and inform program interventions	Heat pump adoption is strong and growing
Advance load-based test procedure and spec	Opportunity to better differentiate efficiency among heat pumps
Test intervention concepts and strategies for	Leading manufacturers agree with need for better differentiation
measuring program impact.	> Savings possible with little to no incremental cost



Changes Since Concept Advancement

	Concept Advancement Proposal	Program Advancement Proposal
MT Approach	Grow heat pump adoption	Improve efficiency of all heat pumps
Product Definition	Product- and practices-focused	Improvement-focused (e.g. low load efficient)
	Variable speed only	Two- and three-stage, & variable speed
Target Market	Electric resistance heat replacement	All heat pumps ≤ 65,000 Btuh
Intervention	Identify and disseminate installation best practices	Support existing contractor and customer interventions led by utilities, distributors, and other market partners.





REGIONAL ROUNDTABLE



Raise your virtual hand to get in the queue

Who:

- ✓ Committee Members
- ✓ NEEA PMs

Focus:

- ✓ Organizational & program highlights since June
- ✓ Questions/follow up on Program Activity Reports
- What did you learn this quarter?





Please aim for 3-4 min max, thanks!



5 min Stretch Break!



> High-Performance HVAC

Overview of PSE, BPA, and Energy Trust's measure, target applications, and, where applicable, market uptake

Maria Murphy, Sr. Program Manager mmurphy@neea.org



Topic Review: High Performance HVAC



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Public Comment?

Action Items?

Closing Remarks?



Thank you, ISCC

See you tomorrow for Annual Planning at 9:15 am!































