Heat Pumps may be our Shining Star, but we Can’t Hide Love for Ventilation

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CLASSIFICATION LEVEL: PUBLIC
NEEA is an alliance of utilities that pools resources and shares risks to transform the market for energy efficiency to the benefit of consumers in the Northwest.
Market Transformation

The strategic process of intervening in a market to create lasting change.

1. Identify barriers / opportunities
2. Intervene to remove or leverage
3. Track and evaluate market progress
Value of national collaboration on Market Transformation
HVAC at NEEA

• Ductless Heat Pumps – 10+ year regional investment

• In development:
  1. Very High Efficiency DOAS
  2. Efficient RTU
  3. Variable Speed Heat Pumps
  4. Gas Heat Pumps for space and water heating

DHP Program: Forecast vs. Actual Market Penetration
Efficient gas rooftop units (RTUs)

**TIER 1**

>25% of the Northwest’s heated commercial building space

2-10% reduction in commercial HVAC energy use
Efficient gas rooftop units (RTUs)

TIER 2: CONDENSING

>25% of the Northwest’s heated commercial building space

12-40% reduction in commercial HVAC energy use
Efficient gas rooftop units (RTUs)

TIER 2: ENERGY RECOVERY

>25% of the Northwest’s heated commercial building space

12-40% reduction in commercial HVAC energy use
Very high efficiency dedicated outside air system (DOAS)

- **approx. 20%** of the Northwest’s heated commercial building space
- **average 65%** reduction in commercial HVAC energy use
Variable Speed Heat Pumps

approx. 20% of the Northwest’s residential space targeting 30% reduction in residential HVAC energy use
Advanced Heat Pump Coalition

**Goal**
Increase research collaboration among energy efficiency organizations that are working to accelerate market adoption of advanced heat pumps

**Activities**
Webinars, manufacturer engagement, collaborative research, workgroups

**Workgroups**
- Improved Test Procedure and QPL
- Technology Roadmap
- Best Practices

The brightest minds in heat pumps from organizations such as these:
Gas Heat Pumps

Gas-driven Heat Pump (GHP*): Instead of electricity, GHPs use heat to drive the process

- Driven by gaseous fuels including natural gas, propane, as well as blends using RNG and/or Hydrogen
- Commercial available now, residential in 2023

*Or “Thermal Heat Pump” (THP)
North American GHP Collaborative

...developing and implementing activities to accelerate adoption of gas heat pump technologies

• Working with manufacturers to develop **product launch strategies**
• Conducting **market research** to inform supply chain business decisions and utility market interventions
• Adopting joint **product specifications** to ensure customer satisfaction and product performance
• Supporting **supply chain education** to prepare the market
• Offering **aligned incentives** on qualified products to drive adoption
• Working with standards-setting organizations to incorporate GHPs into **codes and standards**

Representing >30% of US and Canadian households that use gas
If you’ve got to get some HVAC into your life, reach out!

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