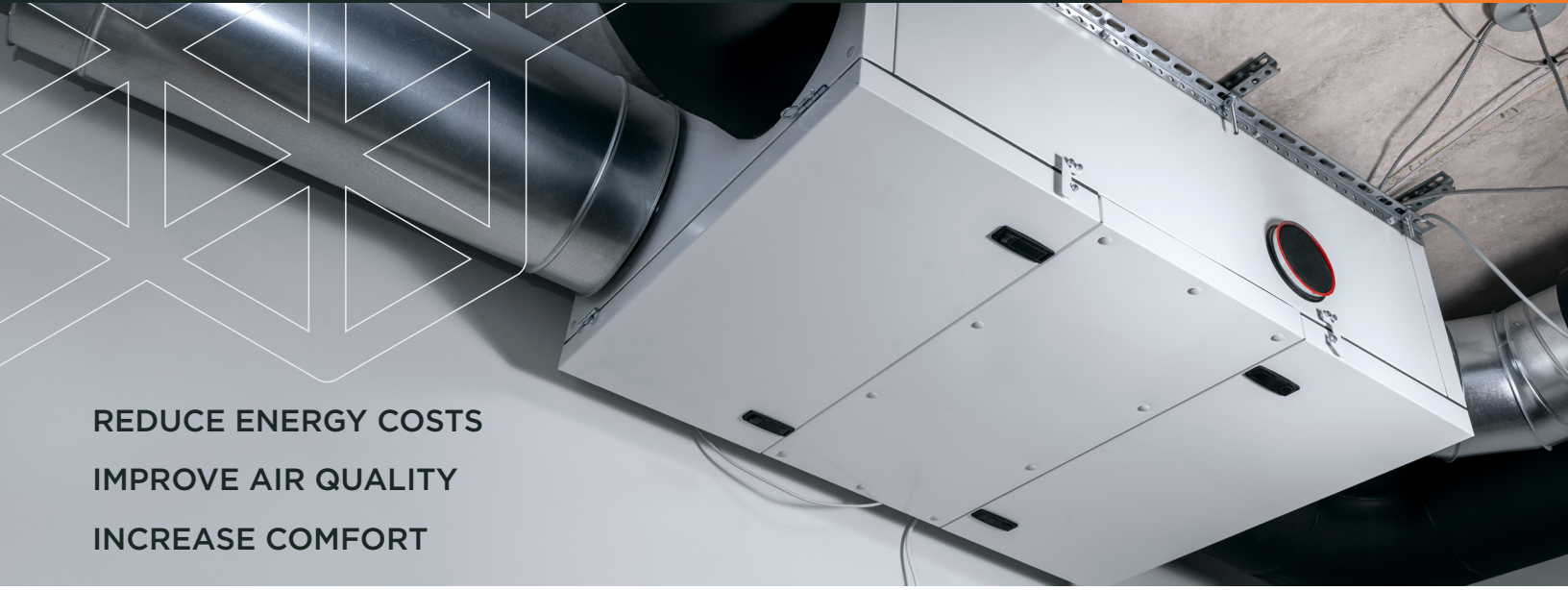


HEAT RECOVERY VENTILATION

FOR COMMERCIAL
BUILDINGS



REDUCE ENERGY COSTS
IMPROVE AIR QUALITY
INCREASE COMFORT

KEEP YOUR AIR, AND MONEY, UNDER ONE ROOF

Reuse warm air and help improve indoor air quality with heat recovery ventilation (HRV). This system helps take heat from existing air and use it to pre-heat outdoor air, making heating more efficient and cost-effective. HRV also helps reduce moist, stale air by replacing it with clean, filtered, warm air, thus improving indoor air quality and making a healthier environment.

BENEFITS MAY INCLUDE



Improved comfort



Improved indoor
air quality



Reduced fan usage

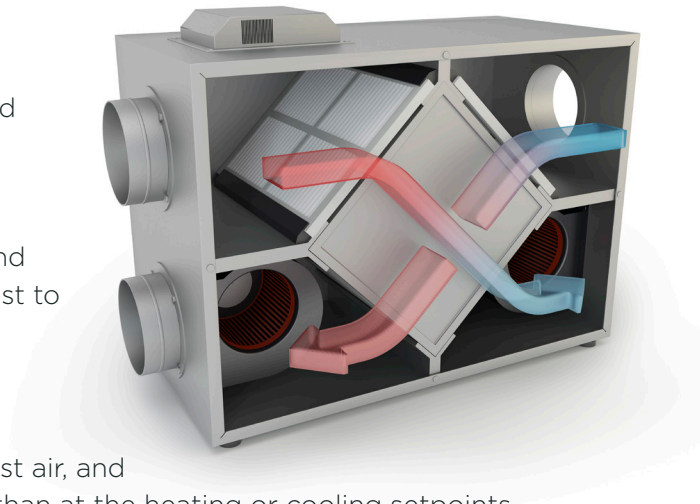
CONTACT YOUR LOCAL UTILITY ABOUT INCENTIVES.
UTILITY PARTICIPATION AND INCENTIVES VARY.

How Does It Save Energy?

Heat Recovery units can be a stand-alone device or integrated directly into HVAC equipment and are commonly located on rooftops or in mechanical penthouses. They utilize a heat exchanger media, typically a rotary wheel or fixed plate to exchange heat between building exhaust air and supply air and capturing the majority of the heat that would otherwise be lost to the outside.

The primary sources of savings from HRV units are:

1. Reduced fan load on the primary heating/cooling system
2. Ability to preheat incoming supply air using building exhaust air, and
3. Deliver ventilation air at room neutral temperatures rather than at the heating or cooling setpoints



Incentive requirements

This measure applies to retrofit, new construction, and major renovation (with exception to HRV Upgrade projects in Washington State, due to code requirements).

Either heat recovery or energy recovery units are applicable so long as the sensible heat recovery portion of the equipment meets or exceeds the sensible rated effectiveness (SRE) of the specified tier.

PRE-CONDITIONS – HRV RETROFIT:

- The space is conditioned by an operational or failed heat pump, or electric-resistance heater as the primary heating source. No other heating sources are eligible.
- The existing system does not have a heat recovery device installed.
- The existing system is currently designed to provide ventilation air.

PRE-CONDITIONS – HRV UPGRADE:

- The space is part of a building addition, new construction or major renovation (i.e., baseboard electric-resistance heating to VRF with ventilation, etc.) project.
- Projects completed in Washington State are not eligible, due to code requirements.

POST-CONDITION:

- The installed heat recovery unit must utilize manufacturer selection software and demonstrate a minimum 70% SRE at 75% of rated airflow for Tier 1, or a minimum 82% SRE at 75% of rated airflow for Tier 2.

Visit bpa.gov/tannw for more information.

Estimated Incentives

\$2/CFM

Tier 1 unit with $\geq 70\%$ SRE; up to \$2/CFM (cubic feet per minute)

\$3/CFM

Tier 2 unit with $\geq 82\%$ SRE; up to \$3.50/CFM



TRADE ALLY NETWORK^{NW}
Building Success Together

Additional terms and conditions may apply.
Utility participation and incentives vary.

Contact Trade Ally Network NW for more information.
Lighting@bpa.gov | bpa.gov/tannw



Trade Ally Network NW is sponsored by Bonneville Power Administration and its Northwest Utilities.