

# Residential Gas Heat Pumps

Solutions for Home Comfort, High Efficiency, Lower Costs and Lower Emissions



## How Do Gas Heat Pumps Work?

Residential gas heat pumps (GHPs) are a highly energy-efficient technology used for space heating, cooling and water heating. GHPs capture heat from the outdoor ambient air as an additional energy source to natural gas and then transfer it indoors for heating. Because the energy output is greater than the energy input, the units can achieve efficiencies greater than 100 percent. Residential GHPs have an advantage as they can capture heat off the combustion process to improve overall efficiency and operate better in colder climates than their electric counterparts.

## Residential Gas Heat Pump Benefits

- **Sustainability.** GHPs use ammonia which has zero global warming potential (GWP), unlike electric heat pumps which use hydrofluorocarbons (HFCs).
- **Home Comfort.** GHPs supply reliable and efficient heating, cooling and/or domestic hot water heating and operate efficiently in cold climates. No backup unit is required.
- **Highly Efficient.** With efficiencies greater than 100%, GHP units exceed codes and standards.
- **Affordability.** GHPs have lower operating costs as compared to existing gas heating equipment or electric heat pumps. Additionally, no infrastructure upgrades are required.
- **Easy Installation.** A GHP is a plug and play installation. The unit replaces a furnace and integrates with existing ductwork.



## About the North American Gas Heat Pump Collaborative

The Collaborative is a group of gas and dual fuel utilities who supply more than one-third of all U.S. and Canadian households with natural gas. The Collaborative recognizes that GHP technologies play an important role in decarbonization and uses market transformation tactics to accelerate the adoption of GHP technologies throughout North America. The Collaborative and its member utilities actively promote HVAC GHP technologies through financing, training opportunities, outreach, and developing technology advocates across North America.

To learn more about the Collaborative's capabilities and connect with the Collaborative members, visit our website [gasheatpumpcollab.org](https://gasheatpumpcollab.org) or email us at [info@gasheatpumpcollab.org](mailto:info@gasheatpumpcollab.org).