



# ENERGY STAR® CERTIFIED AIR SOURCE HEAT PUMPS



## A Highly Efficient, Tried-And-True Way to Comfortably Heat and Cool Your Home

Keeping your home at a comfortable temperature can be expensive. A typical household's energy bill is around \$2,000 annually, and almost half of that goes to heating and cooling! To cut these costs, an **air source heat pump (ASHP)** can be installed and connected to the conventional forced-air ductwork system that is typical of most American homes. (For homes without ductwork, see [www.energystar.gov/minisplit](http://www.energystar.gov/minisplit)). ASHPs that earn the ENERGY STAR label are independently certified to save energy, save money, and protect the climate.

### What is an Air Source Heat Pump?

An ENERGY STAR certified ASHP provides highly efficient heating and cooling by extracting heat from outside into your home in winter and pulling the heat out of your home in the summer. For some, it may be helpful to think of a ducted ASHP as a central air conditioner that also works in reverse to provide whole-house space heating in winter. See Figure 1 below.

### Benefits of an Air Source Heat Pump

- **Cutting heating costs compared to conventional heating systems.** An ENERGY STAR certified ASHP can provide heating for approximately 1/3 the cost of traditional electric baseboard heating, depending on where you live, and approximately 1/2 the cost of oil heat. An ASHP is so efficient it can deliver up to three times more heat energy to a home than the electrical energy it consumes. This is possible because a heat pump moves heat rather than converting it from a fuel, as combustion heating systems do.
- **Reducing cooling costs compared to conventional room air conditioners.** During the summer months, a central ASHP automatically becomes a central air conditioner, and with ENERGY STAR, you will have reduced cooling bills due to its highly efficient operation.
- **Reducing greenhouse gas emissions.** An ASHP is good for your home and good for the planet. ENERGY STAR certified models avoid more than 4,500 lbs of greenhouse gas emissions, on average, over the course of their lifespan compared to standard systems.
- **Easy installation.** A central ASHP uses existing ductwork in your home to deliver heating and cooling. In most climate zones, an ASHP can be installed as a drop-in replacement when either a central air conditioner or a furnace needs replacement.
- **Heating and cooling in one system.** ASHPs offer highly efficient heating and cooling in one integrated system.

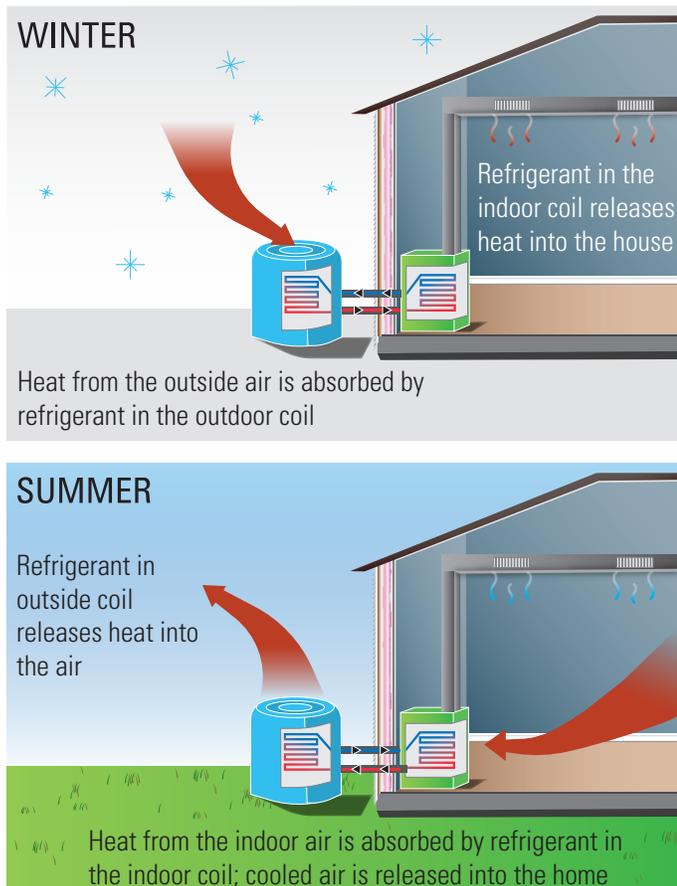


Figure 1. How an ASHP Works in Summer and Winter

## Is an Air Source Heat Pump Right for You?

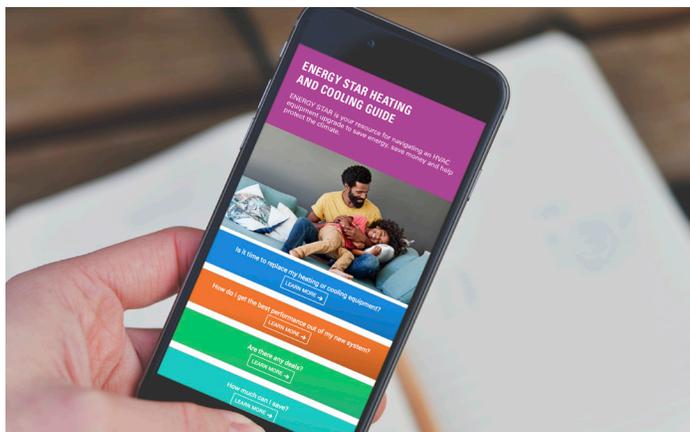
### Where are central air source heat pumps commonly used?

- Homes with aging and costly traditional central heat and air conditioning.
- Newly constructed homes in areas with high fuel costs.
- New high-efficiency homes, including ENERGY STAR certified homes.

**What if I live in a cold climate?** Many new ENERGY STAR certified ASHPs excel at providing space heating even in the coldest of climates, as they use advanced compressors and refrigerants that allow for improved low temperature performance. If you live in climate where winter temperatures regularly dip below freezing, talk to your contractor to choose an ENERGY STAR unit suited to your particular home.

**Don't have duct work?** If your home doesn't have existing ductwork or you are planning an addition or renovation where running ductwork will be difficult, you can still install a heat pump to heat and cool a portion of your house. See Mini Split Heat Pumps at [www.energystar.gov/minisplit](http://www.energystar.gov/minisplit), sometimes referred to as Ductless Heat Pumps.

Check out the ENERGY STAR Heating and Cooling Guide ([www.energystar.gov/HVACguide](http://www.energystar.gov/HVACguide)) to see if an ASHP is right for you. Learn the symptoms of aging heating and cooling equipment, calculate savings, and find product and rebate information.



**Extra Savings!** Air source heat pumps that earn ENERGY STAR Most Efficient recognition deliver cutting-edge energy efficiency along with the latest in technological innovation.

## Take Advantage of Incentives

Air source heat pumps that earn the ENERGY STAR are eligible for a **\$300 federal tax credit** if installed in a primary residence by December 31, 2020. Learn more at [www.energystar.gov/taxcredits](http://www.energystar.gov/taxcredits).

Many utilities offer incentives for installing ENERGY STAR certified ASHPs. Table 1 below shows several examples from across the country. Check with your local utility for more details or go to: [www.energystar.gov/rebatefinder](http://www.energystar.gov/rebatefinder).

**Table 1: Examples of ENERGY STAR Certified Air Source Heat Pump Incentives**

State	Utility	Incentive
AR/LA/TX		up to \$2,000
MO		\$450-900
NY		\$800-1,600
OR		\$500-\$1,500
SC		\$300- \$500
NJ		\$600-\$1,000
NM		\$200-\$400
AR/KS/ MO/OK		\$250-\$450