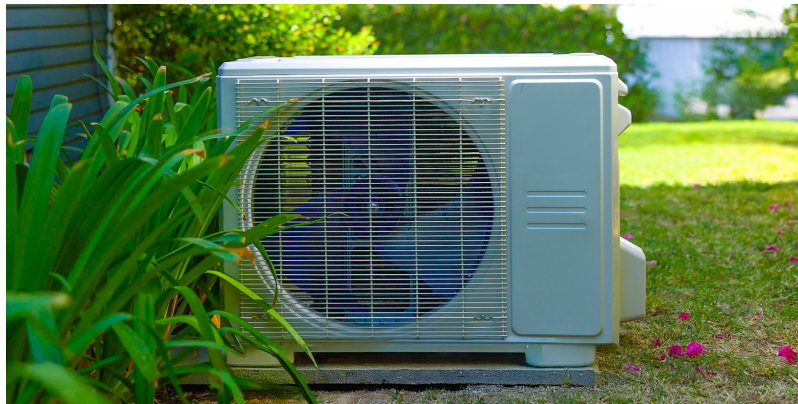


HEAT PUMP HEATING AND COOLING SYSTEM

Your Guide to Efficient Heating and Cooling

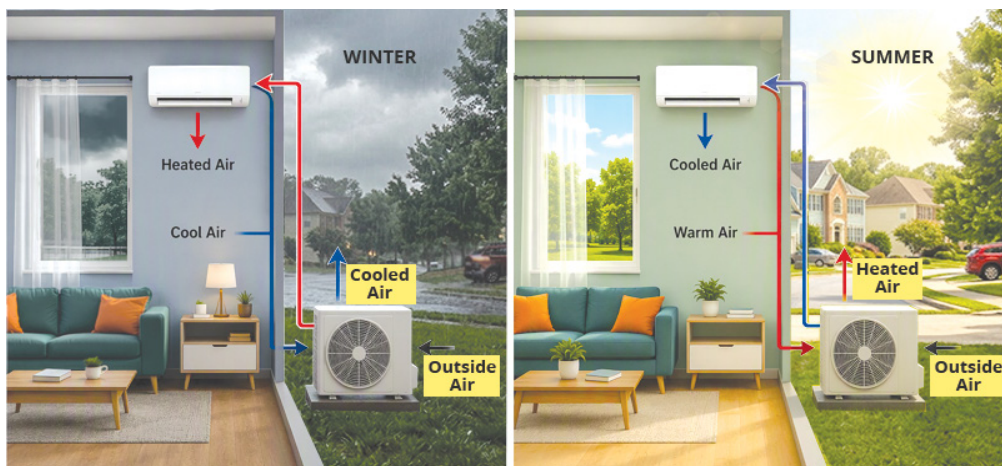
A heat pump heating and cooling system is an energy efficient way to heat and cool your home all year round. It's an air conditioner that also works in reverse to heat your home in the winter. If you live in a region with mild winters (mostly staying above 35 degrees), a heat pump system is a great way to save on your energy costs. Heat pumps are an efficient and clean alternative to a gas furnace.



BENEFITS OF ELECTRIC HEAT PUMP HEATING AND COOLING SYSTEMS

- **Save Money** | Heat pumps may help reduce energy costs compared to traditional heating and cooling systems.
- **Energy Efficient** | The ability to either heat or cool a home, combined with the fact that heat pumps move heat rather than create heat, makes heat pumps an excellent option for consumers interested in energy efficiency.
- **Help the Environment** | Gas heating systems emit greenhouse gases into the atmosphere. Heat pumps produce zero harmful greenhouse gas emissions or smog producing emissions and help protect our environment.
- **Potentially Safer** | Heat pumps can also eliminate the risk of carbon monoxide poisoning and problems that can occur with gas combustion appliances.
- **Health and Wellness** | Heat pumps eliminate the risk of carbon monoxide poisoning that can occur with the use of natural gas, propane, or heating oil.
- **Comfort and Control** | Certain heat pump technologies enable heating and cooling by room, providing households with the control to adjust temperatures as needed for each room's maximum comfort.
- **Flexibility** | With several options to choose from, there is flexibility in selecting the best type of heat pump solution, based on household needs and savings goals.

Heat pump systems work by moving heat. Because they both heat and cool, they save energy and money over their lifetime while improving indoor air quality.



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TYPES OF ELECTRIC HEAT PUMP SYSTEMS

- **Central Heat Pump System** | This is the most common heat pump option for Southern California. An outside heat pump unit works in conjunction with an indoor air handling unit to move conditioned air to each room, acting as an air conditioner in the summer and a heating system in the winter.
- **Cold Climate Heat Pumps System** | This system is available for colder climate zones and can operate at higher capacity and efficiency at temperatures down to 5 degrees or colder.
- **Single-Zone Ductless Mini-Split System** | This system works best when flexibility is needed or space is tight. With small, ductless units, heating and cooling can be managed by room or area, allowing for better energy management while avoiding ductwork energy losses.
- **Multi-Zone Ductless Mini-Split System** | This system offers a great solution for heating and cooling multiple rooms in homes that cannot feasibly accommodate ductwork. An added bonus of this system is that each room can have a different temperature setting for comfort and additional energy savings by providing only the required cooling or heating for that room.



HOW DOES A HEAT PUMP WORK?

As part of a home heating and cooling system, a heat pump transfers heat from one place to another. A heat pump is a mechanical refrigeration system that can be reversed to either heat or cool a living space. When it's cold outside, a heat pump extracts outside heat and transfers it inside. When it's warm outside, it reverses direction and acts like an air conditioner, removing heat from your home.



TIPS FOR CONVERTING TO A HEAT PUMP SYSTEM

For Southern California's warmer climate, consider SEER2, HSPF2 and EER2 ratings when selecting a new heat pump. For high-efficiency equipment, look for ENERGY STAR®-certified units.

FOR MORE INFORMATION

Visit sce.com/electrification

Sources

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Footnote:

Seasonal energy efficiency ratio (SEER) measures cooling efficiency. Heating seasonal performance factor (HSPF) measures heating efficiency. Energy efficiency ratio (EER) measures energy efficiency.