

A Heat Pump is a cost-effective heating option where daytime temperatures average 50° or above.

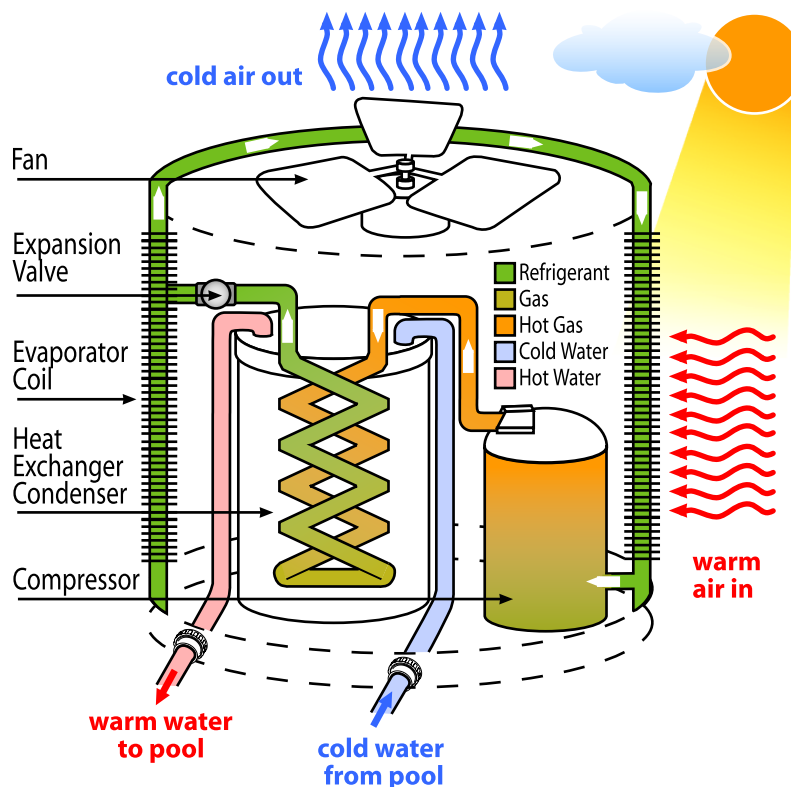
How Does A Heat Pump Warm A Pool?

Electricity is used only to transfer heat from the outside air, not to create heat. Because of its ability to absorb and transfer heat energy, refrigerant is used to capture the heat in the outside air and transfer it to the pool water.

The **fan** circulates air through the outer **evaporator air coil** that acts as a heat collector. The liquid refrigerant in the air coil absorbs the available heat in the ambient air, transforming it into a gas. The refrigerant gas is then pumped into the **compressor**. When this warmed gas is compressed, it intensifies or concentrates the heat, like a magnifying glass in the sun.

This intensely hot gas is then pumped into the **heat exchanger condenser** where the actual heat transfer takes place. As the pool water passes through the heat exchanger, the hot gas gives up its heat to the cooler pool water.

The refrigerant returns to a liquid state and is pumped through the **expansion valve** then into the evaporator air coil to start the process all over again.



Relative Pool Heating Cost Comparison

How Efficient Is It?

Operational Cost Comparison
for Equal Amounts of Pool Heat
A heat pump is the most efficient
way to heat your pool.

Compared to L.P. gas heaters, a heat pump
produces 5 times more heat for every \$1.00
you spend on operation

HEATER TYPE	1	3	5	7	9
HEAT PUMP	[Bar]				
NATURAL GAS HEATERS	[Bar]				
L.P. GAS HEATERS	[Bar]				
ELECTRIC RESISTANCE HEATERS	[Bar]				