Lake Oswego Sustainability Network



Heat Pumps

Heat pumps are available to both heat your house and your water. In both cases they operate like a refrigerator in reverse. They take the heat that is in the air outdoors, compress it and warm either your house or your water.

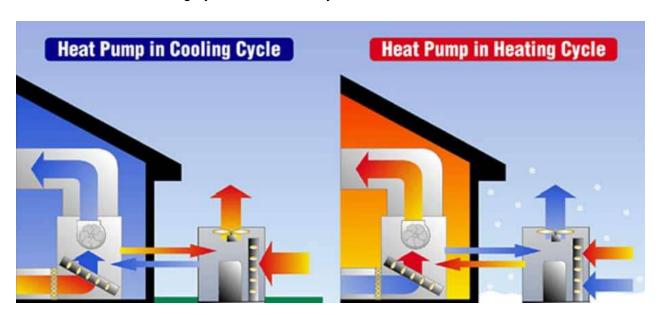
Fossil fuel furnaces typically need to be replaced every 10-15 years. You don't want to wait for your furnace to fail and have to make a hasty decision. In fact, your furnace becomes less efficient and more costly to run as it ages so you may want to retire it before it breaks down. If you want to get the benefit of a system that provides more comfort with a steady temperature throughout the day, costs less to operate, and has the lowest impact on the environment, replace your old fossil fuel furnace with a heat pump.

So now is the time to do a little homework to understand what the choices are, what financial incentives exist and then contact one of our recommended dealers to find out which options are best for you.

Heating and Cooling Your Home

Today's heat pumps can extract outdoor heat when the temperature is as low as -5°F and are backed up with resistance coils that can provide heat in the rare case the outdoor temperature gets colder. What is great is that when the weather gets really hot you flip a switch and your heat pump becomes an air conditioner.

There are central heat pumps with a compressor outside that use an indoor air fan to move the heated or cooled air through your current duct system as shown below:



There are also ductless mini-split heat pumps that work well in smaller homes as shown below:



A good place to help you understand which type of heat pump makes sense for you is to start with information provided by Portland General Electric at their <u>High Efficiency Heat Pump</u> page.

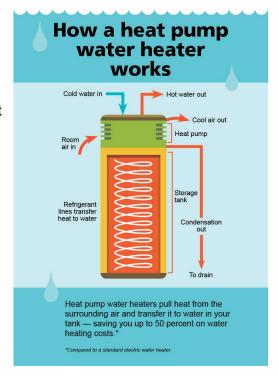
PGE's offers free consultation with their PGE Energy Experts who can

- · Help you decide which heat pump makes sense for your home
- · Explain incentives and tax credits
- · Provide a list of contractors and help you decide which ones could be best for you
- · Answer questions when you're reviewing bids
- · And, provide post-installation advice on your Oregon rights if problems arise.

They can be reached either by filling out this <u>form</u> or calling them at 503-612-3500 and asking to speak with a PGE Energy Expert.

Heating Your Water

Water heaters typically last 8-10 years and can be replaced with a super-efficient heat pump water heater. Since heating water is the second greatest use of energy in your home it makes sense to consider using a heat pump water heater for both cost savings and to reduce your impact on the environment.





Here is an <u>in-depth article</u> from "This Old House" about their benefits and how they operate.

Watch a video from Georgia Power demonstrating how a heat pump water heater works.

Click https://youtu.be/EMdZr-TAga0

Additional Information about Heat Pumps

To learn more about heat pumps both to heat your home and your water, check out our list of Frequently Asked Questions and other resources on our <u>Electrify LO Resources</u> web page.

List of Recommended Vendors

Heat pump technology and financial incentives are getting better all of the time. *Electrify Now* has developed a list of vetted local vendors and installers that can help you decide what is best for your home, what it will cost and what financial incentives are available.

Heat pump installation for heating and cooling your home

Heat pump installation for heating your water