Heat Pump or Furnace: Which is better?

We often get asked which is a better choice, an air source heat pump or a furnace? There are drawbacks and benefits to both and we will discuss some of them below.

Furnace benefits:

As a source of heating, propane has a lot of energy per gallon. A modest sized furnace can put out a lot of heat very easily. Modern furnaces are able to modulate their output to better match the current heating load. Because the electrical power required to operate a furnace is quite low, they make a tremendous amount of sense if a backup generator is envisioned. They are also inside the home and protected from the elements.

Furnace drawbacks:

Furnaces need combustion air and need a flue which means they need to have access to the outside of the building. Propane is flammable and explosive and propane pricing is volatile. Not too long ago, propane was almost $5/gallon due to inadequate supplies and gouging; now it is $2/gallon. All we know is that it will go up at some point in the future.

Heat pump benefits:

An air source heat pump is very efficient and modern heat pumps get 3 units of energy from the Sun for every unit of electricity used. This makes them ideal partners with solar photovoltaic panels on the roof – the best way towards a net zero house. The Sun will never send you a bill – though PV is a large investment, the panels will work for 15 to 20 years.

Heat pump drawbacks:

Air source heat pumps need access to outside air so they are exposed to the elements. This also means that they have to extract heat from the frigid winter air resulting in frost build-up and the need for defrost of the outside unit coil. It is hard to cover the electricity use of the heat pumps with a normally sized backup generator. Heat pump output is also fairly low – it would take four heat pumps to equal the heat output of a large furnace!

Our goal is to be **Martha's Vineyard's premier plumbing and HVAC shop –** we appreciate the opportunity to discuss how a ***heat pump or furnace*** might be a good fit for your home.