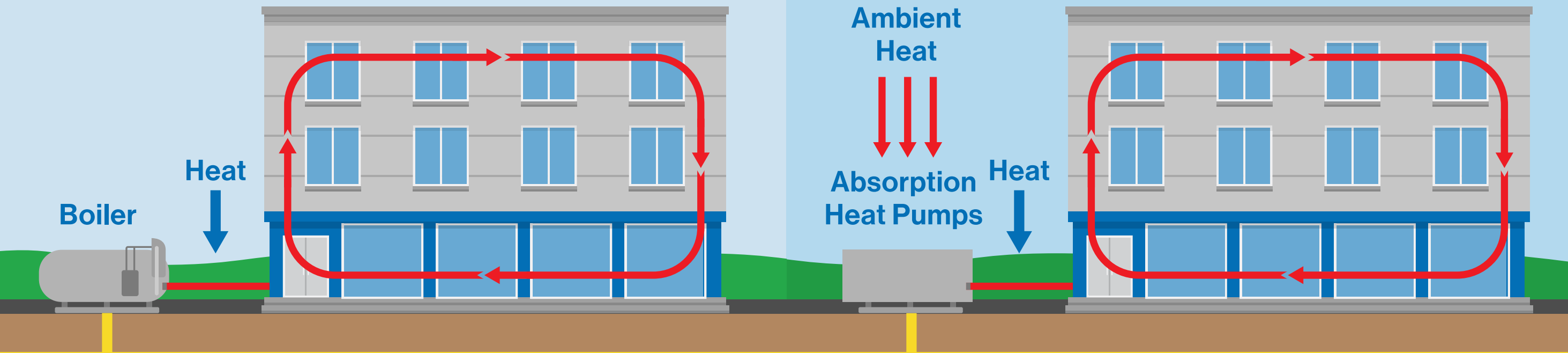


# Absorption Heat Pumps

Similar to how electric or vapor compression heat pumps can be used in place of electric resistance heating, absorption heat pumps can be used in place of natural gas boilers or furnaces to increase the efficiency of gas consumption above 100%.

Absorption cycles are driven by heat, either a gas burner or feed boiler. The cycle takes advantage of the physical properties of the refrigerant and dissolving water to draw energy out of the ambient air (or geothermal water) to supplement the heat provided by natural gas.



## Pros

Absorption heat pumps can reach efficiencies of 160% and show lower energy costs than electric heat pump systems. They can be combined with typical hydronic loops and even retrofitted into older buildings.

## Cons

Absorption heat pump technologies do not offer cooling for a building and have a higher capital cost than a natural gas boiler.