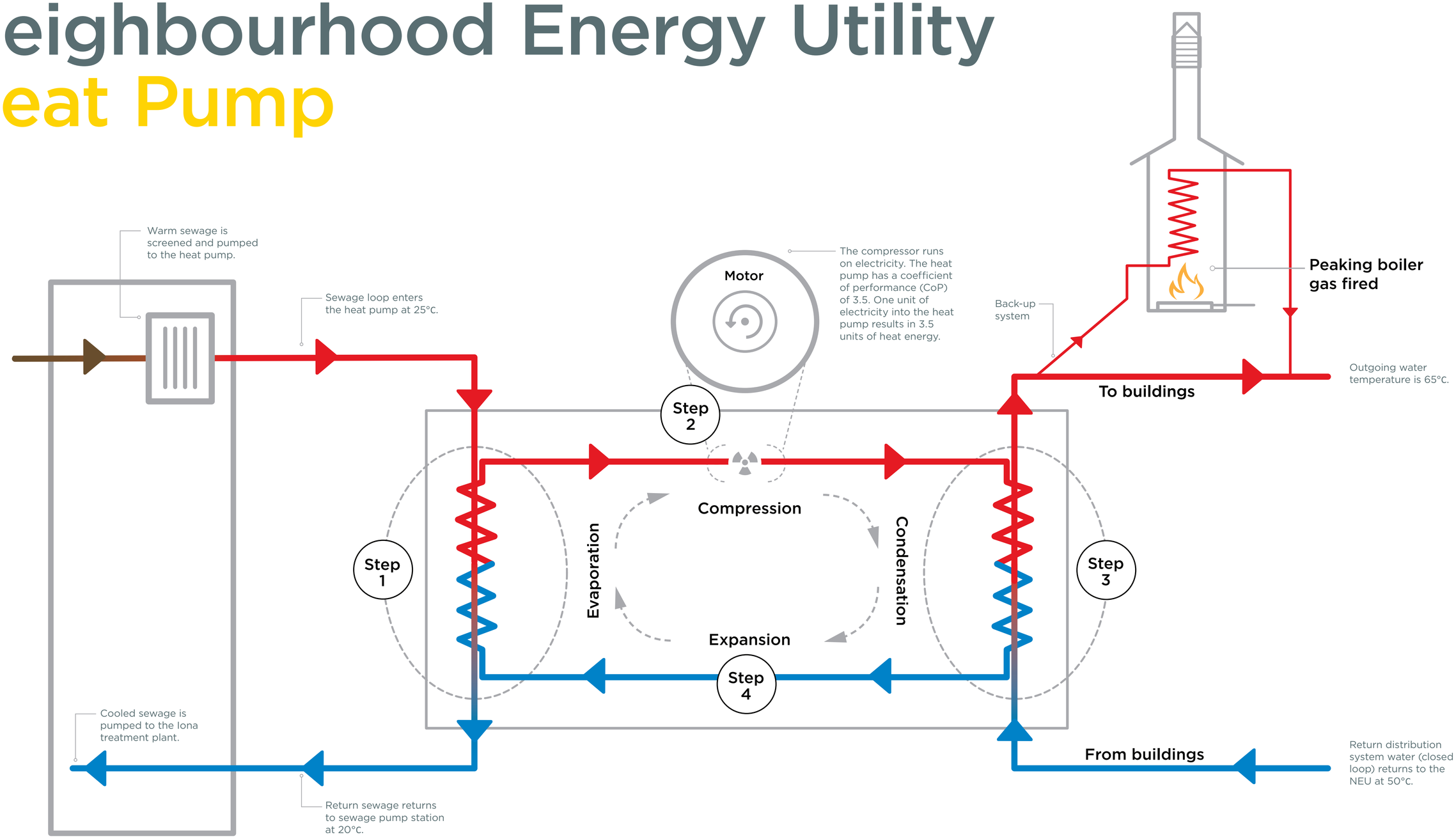
Neighbourhood Energy Utility
Heat Pump



Step 1:
Heat Absorption

Refrigerant in the loop absorbs sewage heat causing it to vaporize into a gas.

Step 2:
Compression

The refrigerant has expanded. It is then run through a compressor which increases the refrigerant pressure, making it into a hot gas.

Step 3:
Heat Transfer

Thermal energy from the heat transfer loop is transferred to the NEU distribution system pipes.

As it cools, the refrigerant gas condenses into a liquid.

Step 4:
Cycle Starts Again

The condensed refrigerant gas returns to a liquid form before it starts the heat absorption process again.

CITY OF VANCOUVER