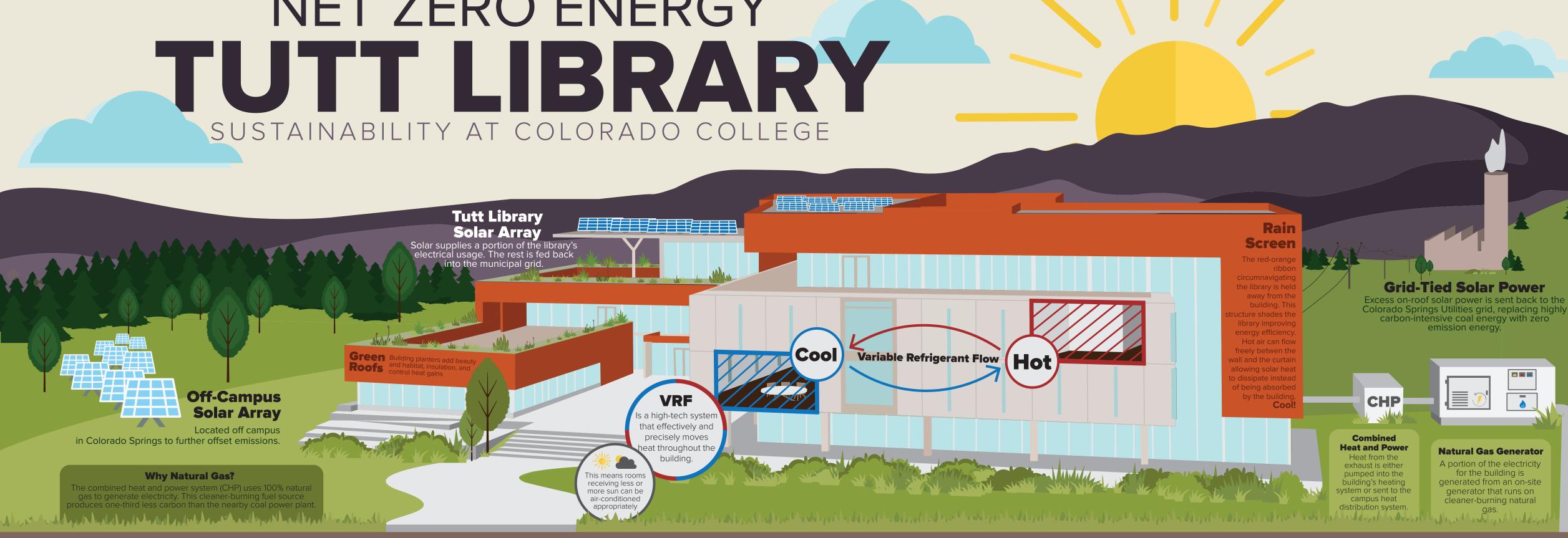
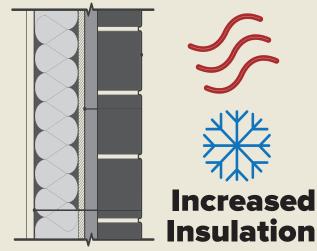
NET ZERO ENERGY



Efficient Design Elements



Occupancy sensors and daylight sensors ensure maximum energy efficiency.



This improves energy efficiency and helps to keep the building warm during cooler months of the year and cool during warmer months of the year.



Glazing is placed to let the sun into the building to naturally light the interior space reducing the need for artificial lighting. Strategically placed blinds keep the building cool during the hottest parts of the day.



Offset carbon output from natural gas generator by putting renewable power back into the grid.

Achieving Net-Zero Carbon

Switch to a cleaner energy source: natural gas

> Utilize excess heat energy from the natural gas generator

> Upgrade systems to improve overall building performance

80 geothermal boreholes were drilled 400 ft. deep under the Armstrong Quad to circulate water to and from the library. During the cooling season, heat is expelled from the building and stored in the ground or sent to other buildings on campus. In the heating season, the library draws on that stored heat and existing geothermal heat to efficiently warm Tutt Library.

Geothermal Heat Exchange Dual-Direction Flow



