The ecology center was designed to revolve around a sole concept of achieving zero consumption of energy and natural resources and being fully sustainable by harvesting energy that is gifted from the sun and the wind current present at the location. The environment friendly design establishes a direct connection between the environment and humans. The NET ZERO ecology center blends with the environment with no harm which represents how the human relationship must be with the mother nature.

The building attempts to utilize the maximum amount of sun light, a free energy source given to planet earth. The main approach for maximization of natural daylight was created by having windows directly facing the sun. However, to avoid overheating of the building the overhangs were designed to correspond with the solar window. This particular technique blocks the hot summer sun, which raises to 88° during summer solstice. Moreover, the overhang ends at the 43° angle of the sun to maximize light and warmth coming into the building during Winter solstice.

**Building rests on a horizontal plane which represents the sun’s path from east to west.**

Direct summer sun is blocked to keep the building from overheating

Winter sun freely enters the rooms creating natural daylight

**The division and shiftment of the building blocks creates a wind tunnel allowing natural ventilation to eliminate the usage of air conditioning.**

Natural air ventilation

ZERO air conditioning usage

Wind current — Passive underfloor cooling