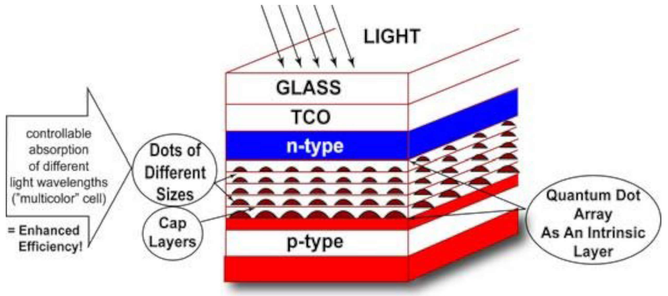
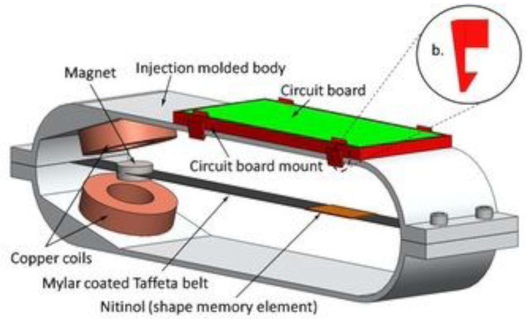
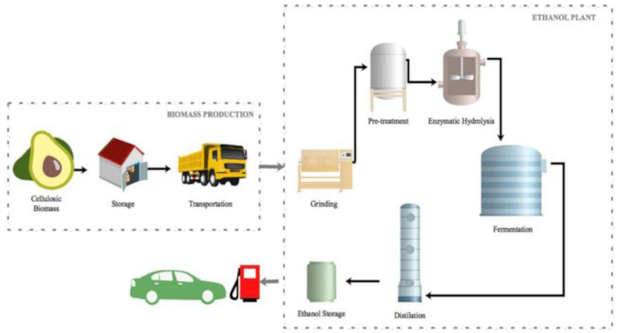
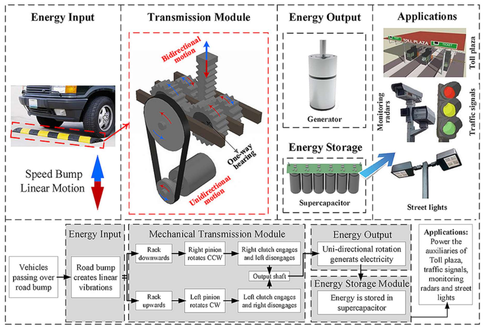
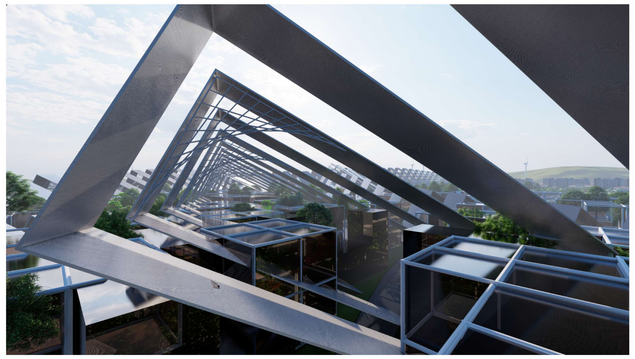
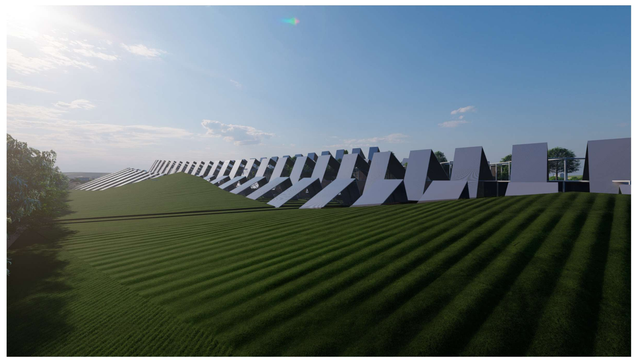


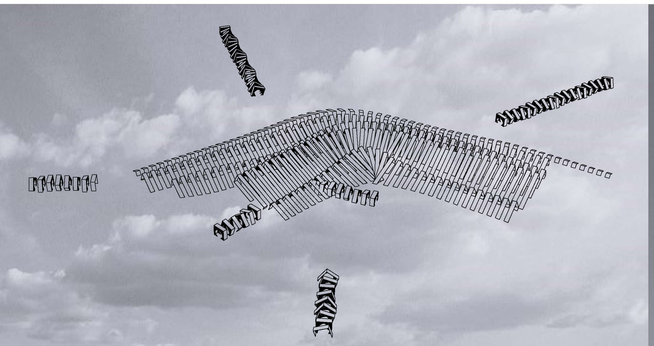






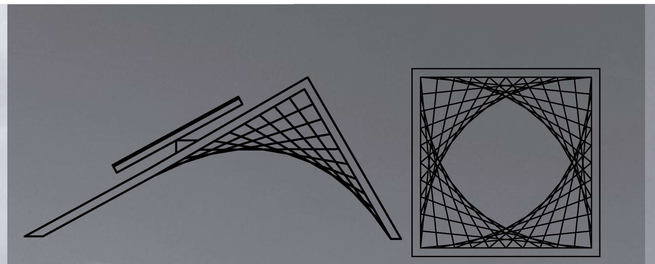






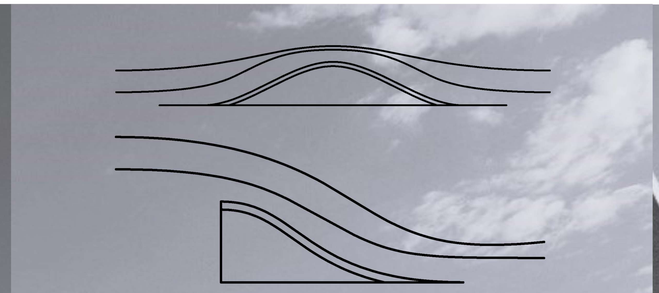
Solar Panel

The solar system technology is photovoltaic solar cell in which each quadratic meter of the surface produce approximately 1000 Watts electricity. This can see seen in the diagram "quantum dot-based nanomaterials and nanodevices for solar cells". The total number of 238 surfaces with the 10m width and 50m to 100m length, plus 70 surfaces with 10m width and 30m length for each surface is covered by the solar panels, besides the area of the tree museum's roof with width 146m and length 146m, which will also be covered by the solar panels. The average annual electricity production from solar panels is 567000 MWh for Mannheim.



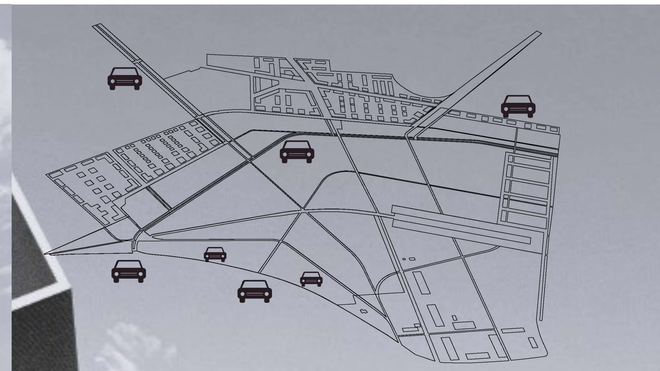
Wind Belt

The total number of 238 angels for installation of the wind belt at the heights points of the designs are located plus the total number of 70 tunnels square frames in 10m height from the ground are located for electricity production.



Biomass

20 hectares agricultural farms plus to 19 hectares greenhouse and gardens provide in total 39 hectares agricultural farms in which some parts of these areas can be used for different kind of biomass energy production, such as Ethanol, Algae biofuel, biodiesel and hydrocarbon plants.



Speed Bump

3610m way length for production of electricity by speed bump which is dependent on the weight of the vehicles and the number of vehicles. This attractive way can be replacing for other alternative ways through this designed complex. The placement of charger parking for electric cars can provides the opportunity to absorb the attention and interest of more zero carbon vehicles.