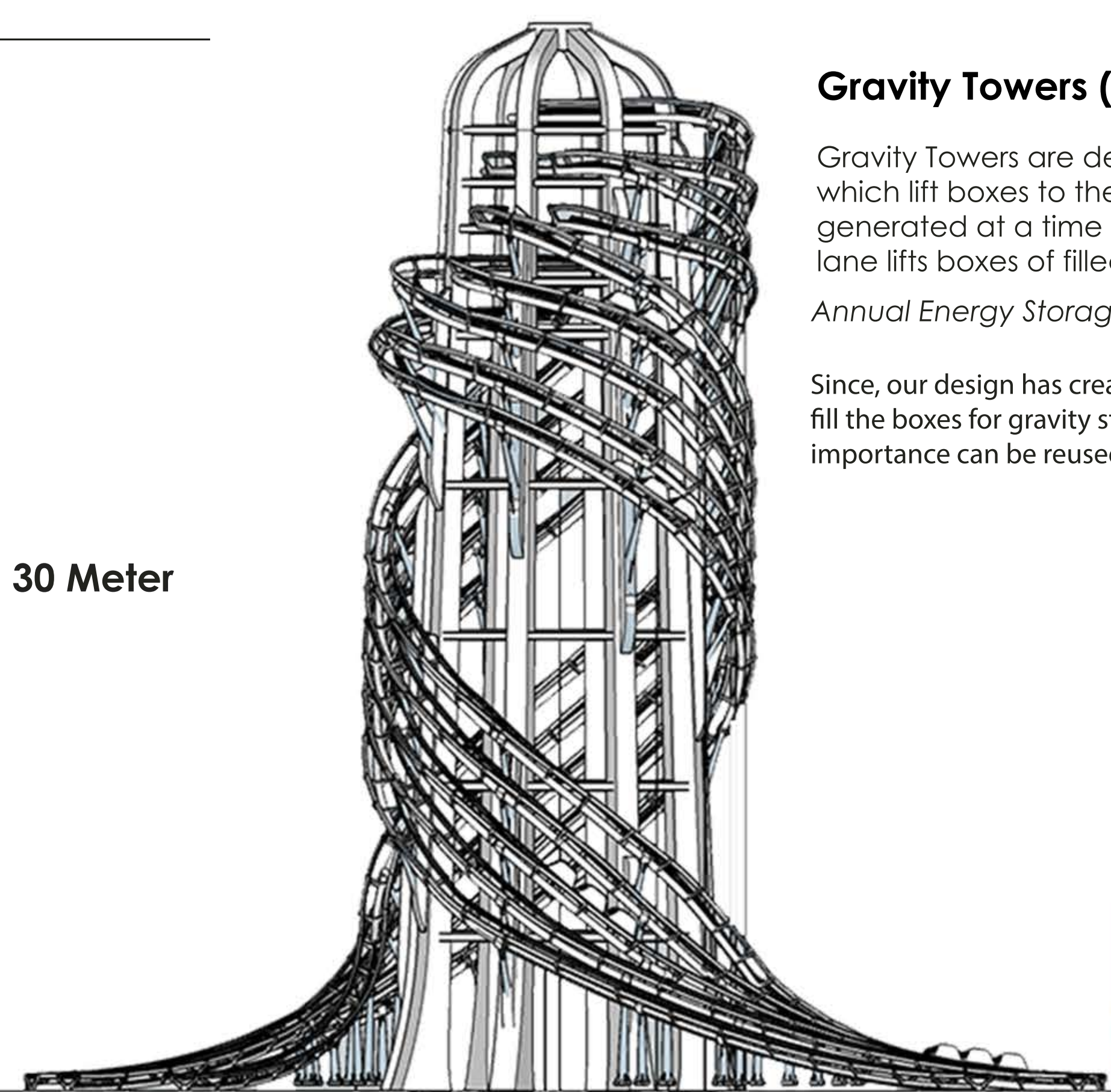




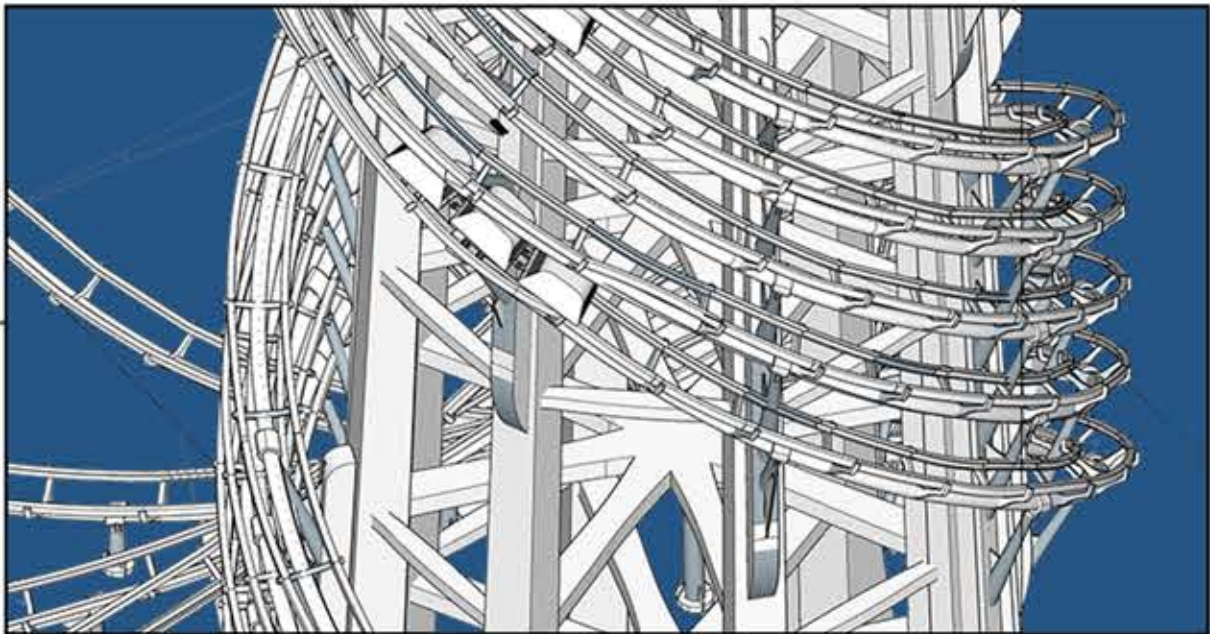
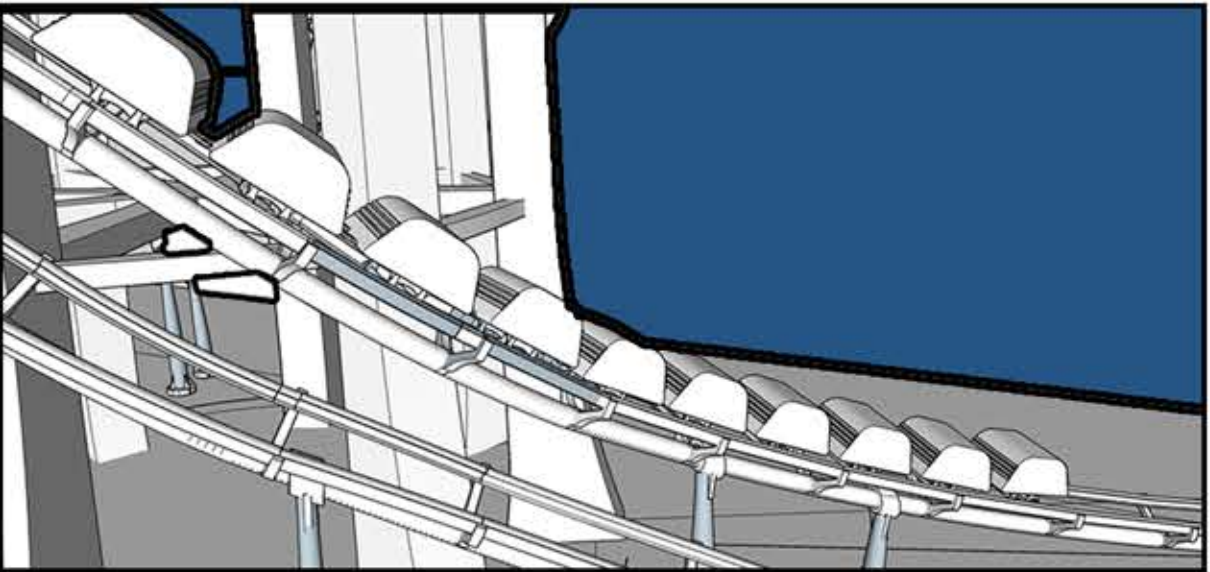
30 Meter

Gravity Towers (Energy Storage)

Gravity Towers are designed inspired from Roller Coasters, which lift boxes to the top as a form of storing renewable energy generated at a time not required. Each tower has 10 lanes, each lane lifts boxes of filled with mud of 320 kg each.

Annual Energy Storage Capacity : 1,284,216 kWh

Since, our design has created levels, the mud extracted by creating lower ground is used to fill the boxes for gravity storage. The steel tracks and steel structures that are of no further importance can be reused for the construction of these towers.

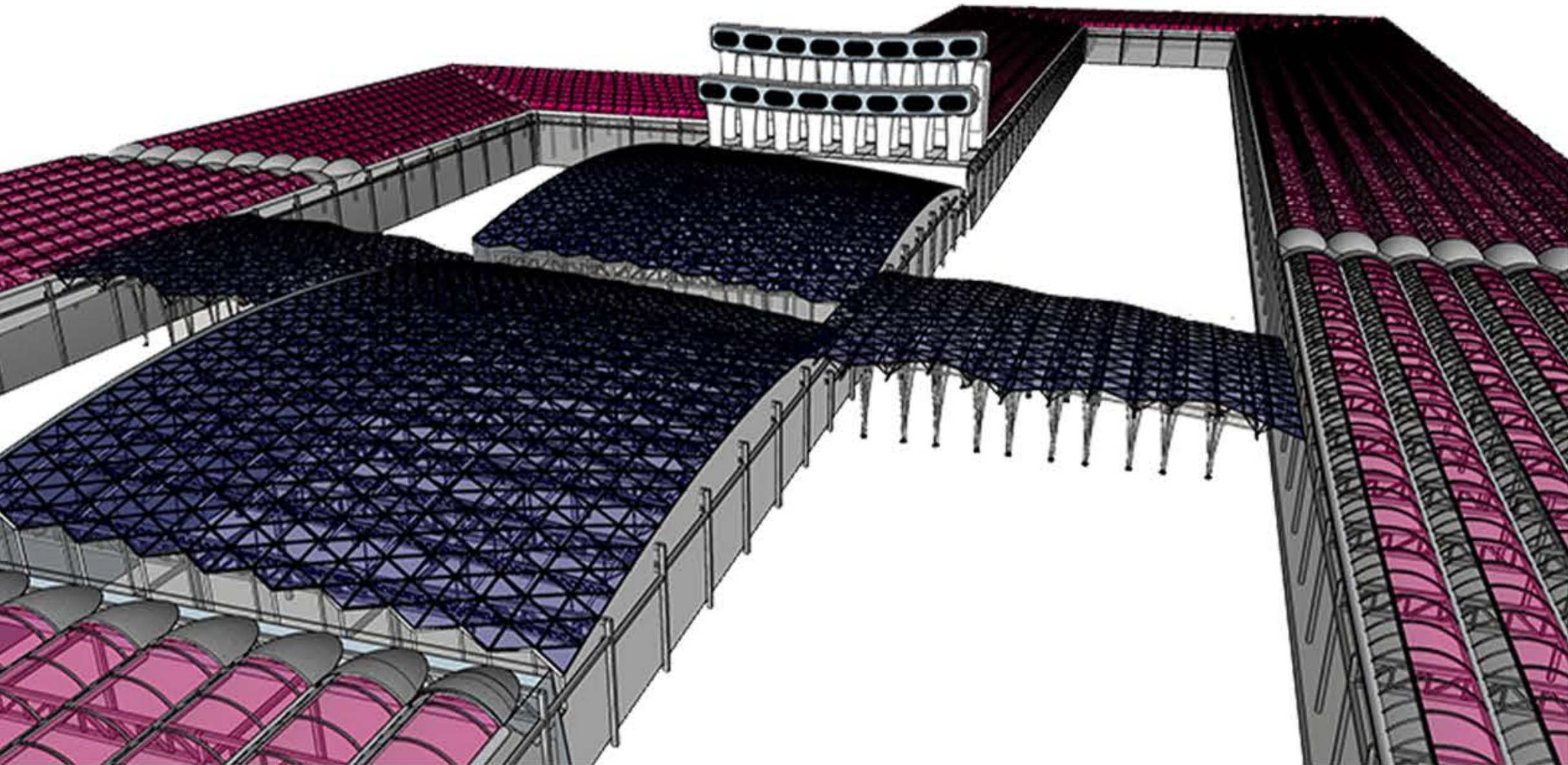


Renewable Greenhouse

Technologies : Luminiscent Solar Concentrator, Geothermal Temperature Balance, Direct Air Carbon Capture

Along with the medium-scale food production in greenhouse, the temperature desired inside is maintained by Geothermal Energy (Heat Pumps), the CO2 that is needed by the production is sourced by Direct Air Carbon Capture Technology that is used. The production area of the greenhouse is 70% covered with LSC on sun-exposed sides and with monocrystalline PV on top of storage and working area of the greenhouse.

Annual Energy Output : 2,000,000 kWh

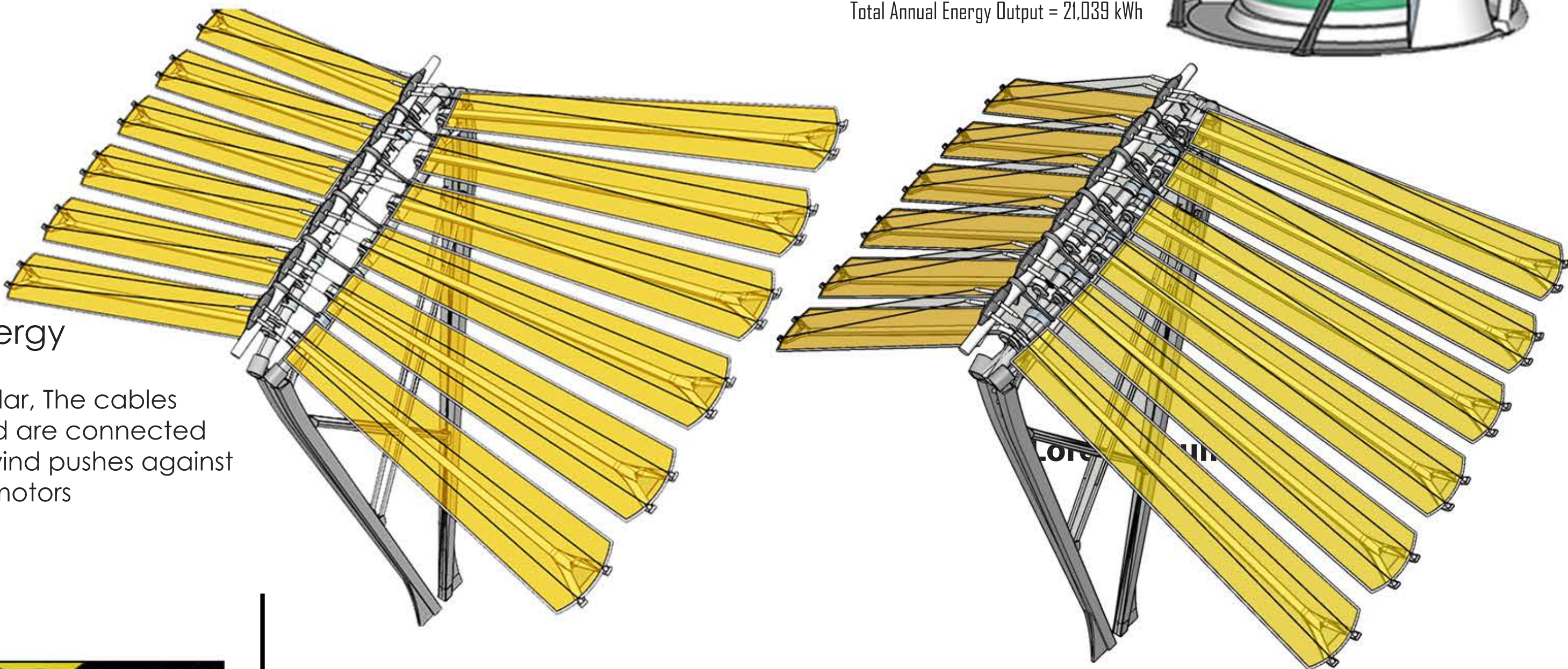
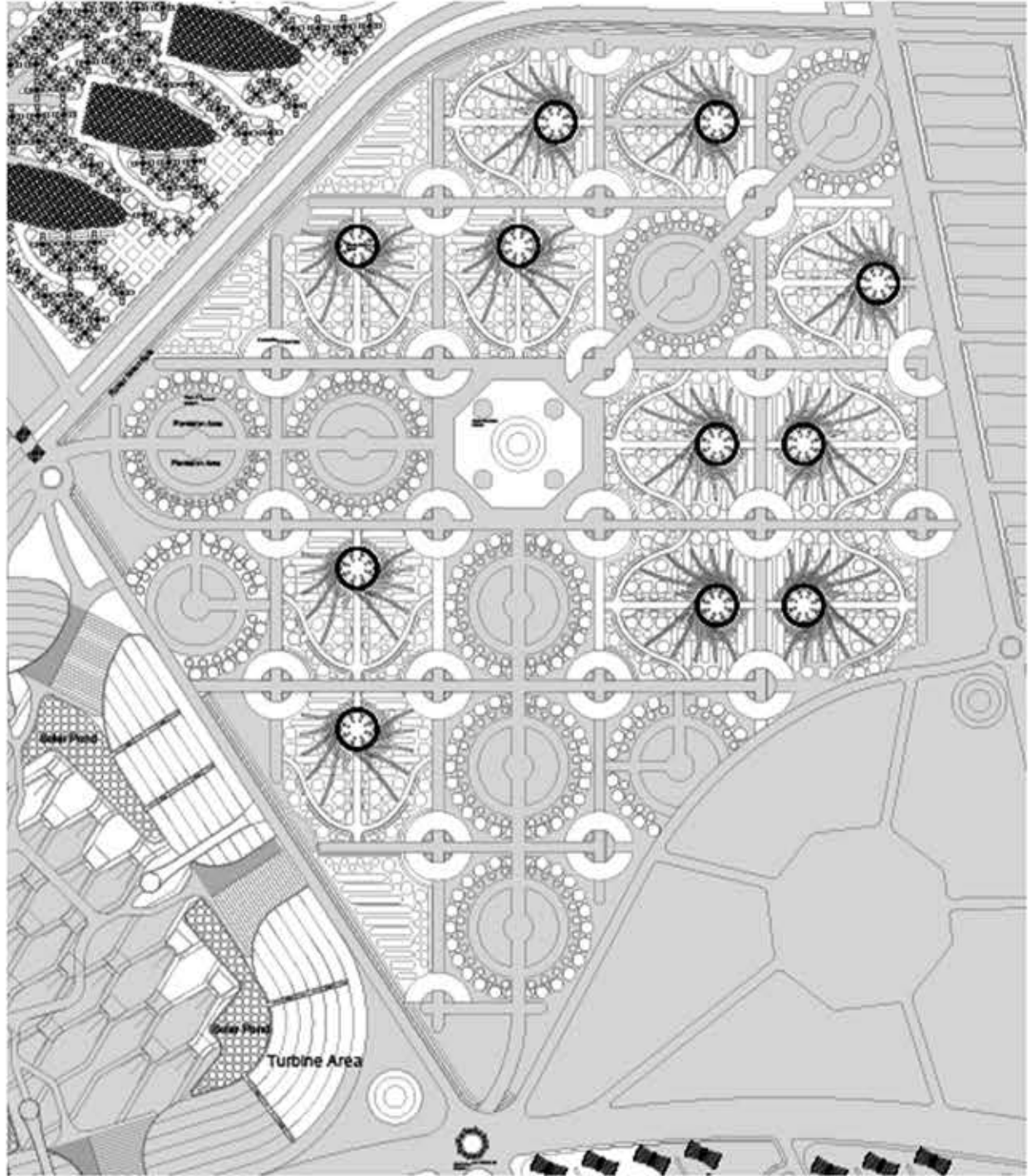
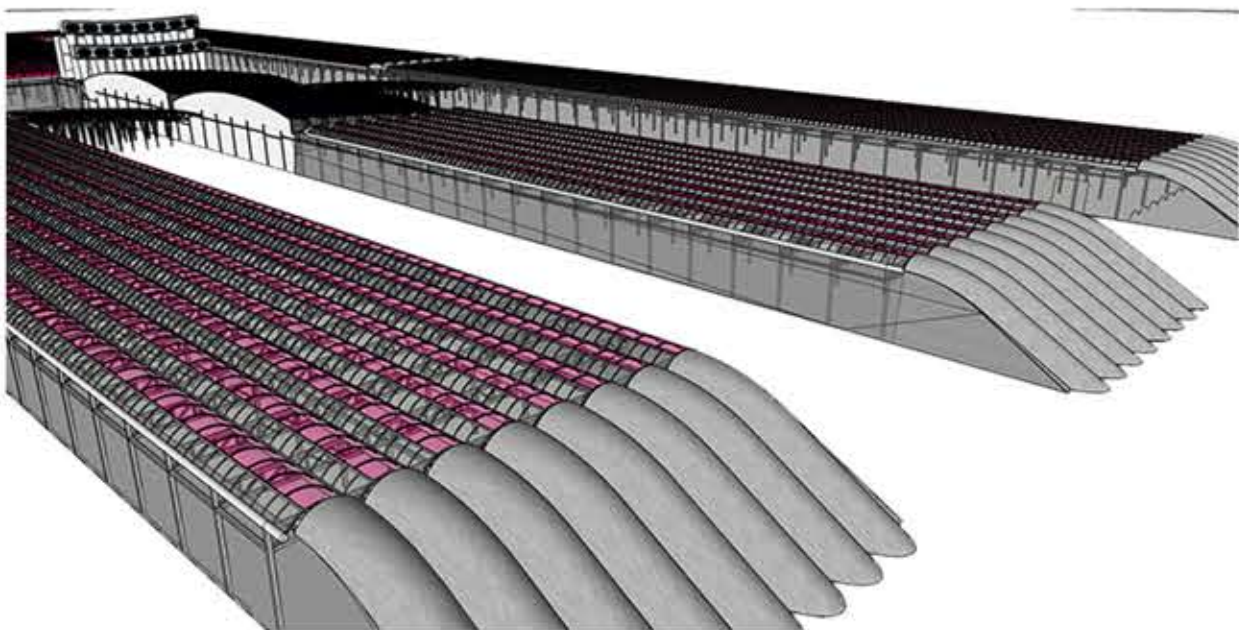
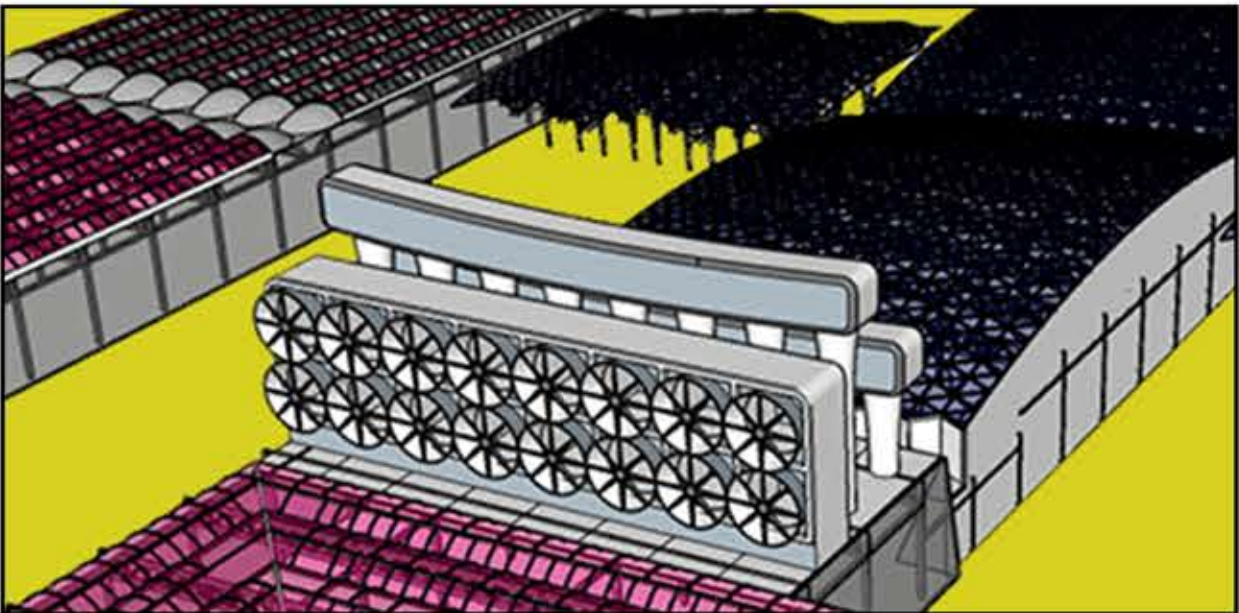


Honey-Bee Solar Belts

Technology : DSSC, Wind Energy

Along with energy generated from Solar, The cables supporting the petals on the outer end are connected to small motors in central rod. When wind pushes against these DSSC petals, it runs these small motors to create extra renewable energy.

Direct Air Carbon Capture



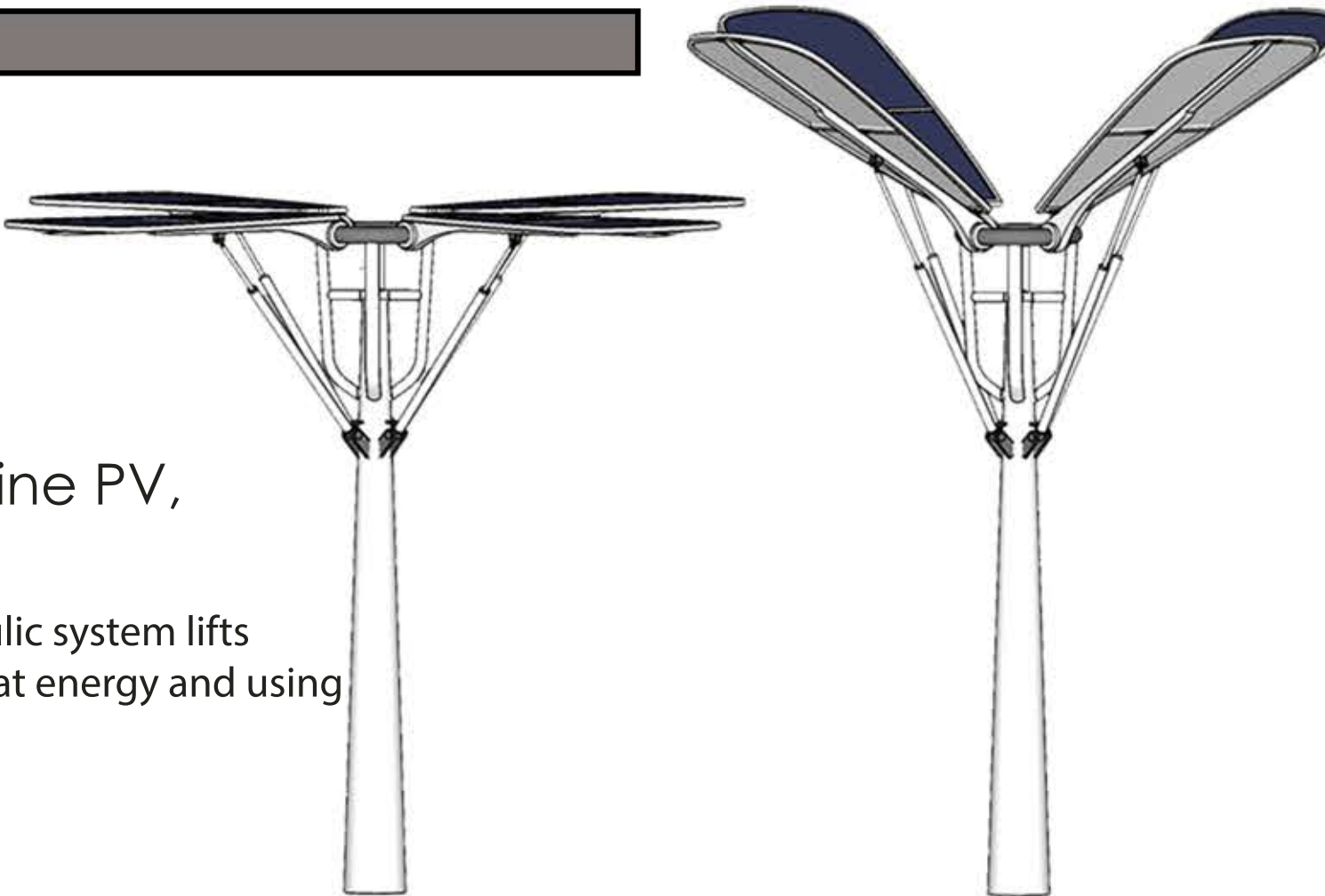
Annual Energy Output of 93 Modules : 4,482,000 kWh

4 Petal Solar Module

Technologies : Monocrystalline PV, Mechanical Storage

When sun charges up these petals, hydraulic system lifts these petals upto 45 degree for storing that energy and using it whenever needed.

Annual Energy Output of 105 Modules : 112,875 kWh
Annual Gravity Storage Capacity : 3,066 kWh



Algae Lamps

Technologies :
ALgae Growth Tanks,
Thermal
Concentrated
(Multifunction of
Rainwater Collection)

The warming of our planet is the most serious issue upon this generation, this module has ALgae growth tanks which capture Carbon Dioxide from our environment and thermal water heating on top by concentrating sunlight onto the central tube by mirrors and rainwater collection and public light pole function along with it.

Algae and Thermal Modules. Total Used = 470
Algae Growth Tank Volume = 2.99 Cubic Meter. Total Algae Growth in Volume = 1405 Cubic Meter
Solar Thermal (Conversion to heat efficiency = 65%, Heat Conversion to Electricity by TEGs = 7%)
Solar Thermal Tube in Algae Module. Area Concentrating Sunlight onto tube = 0.85 Square Meter.
(Total Used = 450)
Solar Thermal Tubes with Solar Wind Belts. Area Concentrating Sunlight onto tube = 2.78 Square Meter.
(Total Used = 451)
Thermal Tubes in Concentric Solar Steel Module. Area Concentrating Sunlight onto tube = 1.25 Square Meter (Total Used = 861)
Total Annual Energy Output = 21,039 kWh

