LAGI / 2019
ABUDHABI

DESIGN DESCRIPTION.

The design of the renewable energy infrastructure is made up of five sculptures that resembles a group of butterflies that cross the space in a northerly direction, whose colored wings are made of photovoltaic glass, and mostly have a slope of 25 degrees facing south. optimize electrical production. The structure of the wings is a double curvature plane aimed at the structural optimized.

The design of the park is inspired by the balance between nature and human habitat, presenting two paths, one of free form that represents nature and is the continuation of the proposed master plan of Masdar City, and another in the form of a grid that represents the city. the green areas between both paths include species of palms native to the place, and is bordered by plants that attract butterflies, so that they inhabit the park permanently.

TECHNOLOGY USED IN THE DESIGN.

The technology used to generate electricity is amorphous silicon PV glass.

CAPACITY IN kWp.

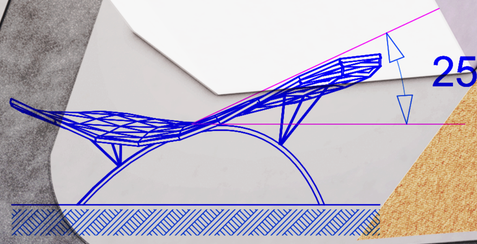
The capacity expected is 114 kWp.

ANNUAL kWh.

The annual energy expected to be generated for the five sculptures is 221,926 kWh.

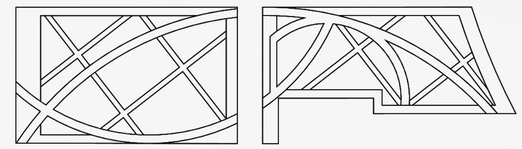
ENVIRONMENTAL IMPACT SUMMARY.

The environmental impact is positive, generating clean energy and including large green areas and species of butterflies in the habitat. Likewise, the use of recyclable materials such as steel and glass in the sculptures and the use of the same materials from the surrounding floors minimize the impact of the environment.



Example of how a flat surface obtains structural rigidity when being curved.

Cast concrete floor.



Concrete pavers. (Path in the form of nature).

Stoneware pavers. (Path in the form of an urban grid).

Green areas and gardening.

Plants that attract butterflies