



OASIS

Oasis is a holistic environmental installation that combines natural and human elements to create a self-sustaining habitat of desert flora and fauna connected to the ecology and the inhabitants of Masdar City. The design goes beyond the dry monumental and its functional role as energy generator and becomes a catalyst for the residents of Masdar City to engage their environment and ecology, and that of Abu Dhabi at large.

The design uses solar cells mounted on conical structures (nests) than shade sunken habitats within each nest. The four solar cones contain within them a variety of responses to the environment and ecology of Masday City, ranging from vegetated habitats for birds, desert shrubs and trees, a water cooled gathering area for the human residents and a ground water recharging step well that addresses the decline of ground water levels in UAE. Beyond its functional role, the arrangement of the solar cells and its apertures are derived from the Islamic carved stone screen patterns (jaalis) of traditional architecture, making a high tech connection with a historical precedent of the region.

The form of the landscape, with its earthen mounds and conical solar cells, evokes the dunes of the desert- while the holistic ecological operation of the envionment evokes the self sustaining nature of an oasis. The solar cones and the earthen mounds complement each other at a formal level. Just as the solar mounds represent the technological acheivment of humans, the earthen mounds represent the an equal cohabitation of the built space by the natural landscae and its native ecology.

A techno-ecological oasis uses energy generated by the solar panels to recycle grey water which is then used to create a shaded landscape of drought resistant shrubs and trees as well as contain a step well to re-charge the depleting ground water in UAE. The holistic design uses the various components to accommodate the natural systems that has historically been part of the site before the development of Masdar. The design uses energy generated by the solar panels to recycle grey water. This water is then used to nurture a shaded landscape of drought resistant shrubs and trees. In addition one of the cones contains a step well that re-charges the depleting ground water in UAE

Nameplate Capacity and Annual Capacity

Total surface area of solar panels: 9000 sq.m.

Total Generating wattage 1800 kW

Annual Capacity 2,838,240 kWh