

Solar Powered

“Cloud Catcher”

Grows trees to transform the energy landscape of Masdar City.

The “Cloud Catcher” uses the suns energy to produce electricity to capture water. Water is used to grow trees to reduce the heat island effect which in-turn reduces energy consumption.

The “Cloud Catcher” combines sustainable energy technology with biology to modify the climate of Masdar City and mitigate the effects of climate change. The project asserts that advances in technology must be used to grow trees and to ensure the uniquely productive relationship between humans and trees are nurtured. Trees benefit us in a myriad of ways, they provide oxygen, food, shelter, materials, they make landscapes and habitats and they mitigate the effects of climate. Trees lie at the source of human existence and success.

The “Cloud Catcher” produces energy to reduce dependence on energy infrastructure.

The “Cloud Catcher”, is a mobile environmental sensing, humidity harvesting independent water supplier that powers itself cleanly from the sun and irrigates vegetation with water sourced from fog. The automated & off-grid vehicle travels across sites harvesting air borne water and delivering it to tree seedlings. As seedlings become established the “Cloud Catcher moves on to colonise other sites in a coordinated and planned re treeing. Highly refined technology allows the “Cloud Catcher” to collect data about growing conditions and plant performance to adjust its travels and program of nurturing in response. A lightweight retractable fibrous mesh harvests water from Masdar’s highly humid atmosphere. Veins on the surface of the nets funnel the collected water into retractable arteries, which in turn channel the liquid to a storage tank in the autonomous vehicles before being distributed to vegetation around Masdar City.

