



5:00 AM



7:00 AM



9:00 AM



11:00 AM



1:00 PM



2:00 PM



4:00 PM



6:00 PM



7:00 PM



9:00 PM

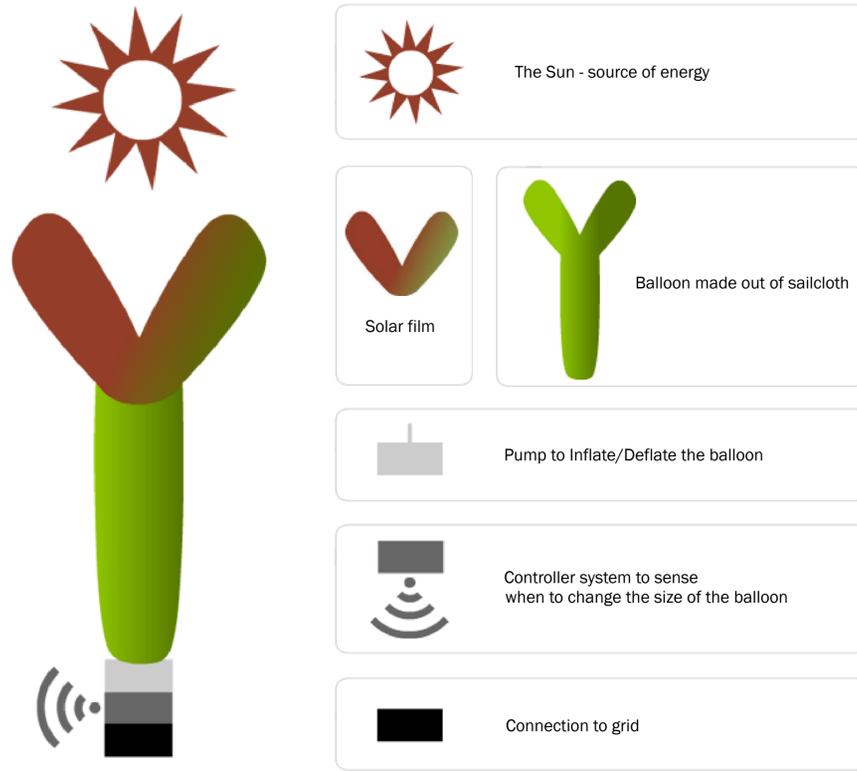


11:00 PM



1:00 AM

The system of each balloon



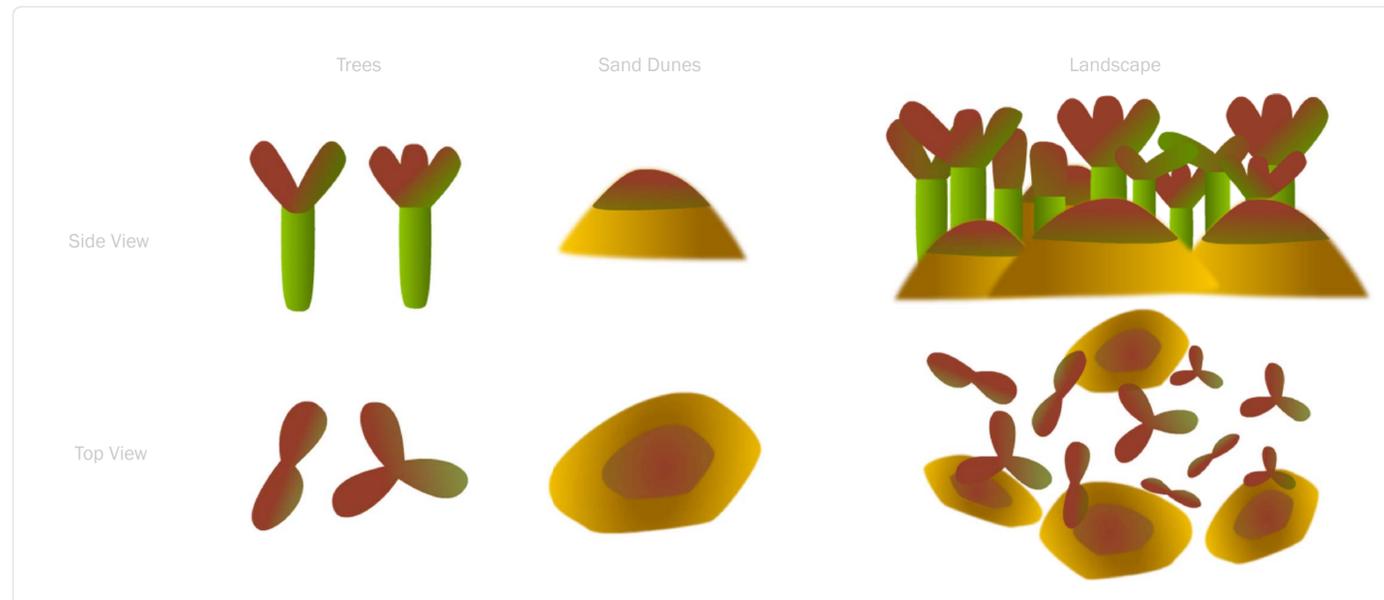
Helioscape is a group of balloons mimicking desert trees and dunes, powered by embedded photovoltaic films. It gradually swells from the ground with sunrise as if sand piles up and plant grows. The artificial landscape illuminates following sunset until the end of the day.

Renewable energy is an old concept. Plants have used the solar energy for the last 3000 million years to create livable environment for life. Every being on the earth is, in fact, from the sun. Sun worship is easily found in many cultures. Until for the last 100 years. Last century was the age of petroleum. Civilization flourished and expanded on petroleum and forgot its origin. Through the project, the team wishes to remind ourselves of the simple truth that life on earth is from and by the sun. The sand dune and the trees in this project also owe their lives to the sun.

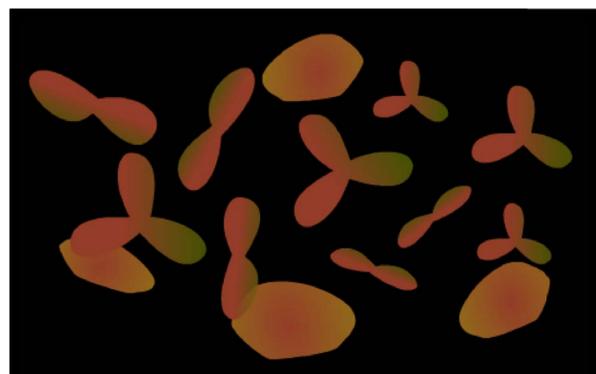
Solar energy is free. But it is not like other sources of energy that are mere matters. It is as though a living being. It rises and sets, on its own rhythm. It shines only on a part of the earth at a time and its amount varies in different locations due to climate or weather changes. Therefore, in using the sun as the energy source one must take such character into account. The project demonstrates the "live power plant" that rises and sets with the source.

Solar energy may be free but is not infinitely renewable. However, human desire knows no bound. What commonly called "environmentally friendly energy" is not for supporting basic life or enhancing happiness of human. People are starving in one part of the world, while, in another part, corns are planted to create bio-gas for vehicles. People are employed in hard labor in mining so that photovoltaic cell or batteries can be manufactured. The project is to make a statement that even using what seems natural and environmentally friendly, solar energy requires a man-made material. We used sail-cloth instead of hard materials such as concrete or metal to create a finite and perishable power plant.

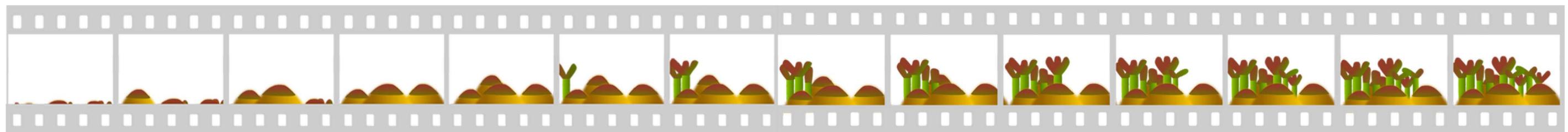
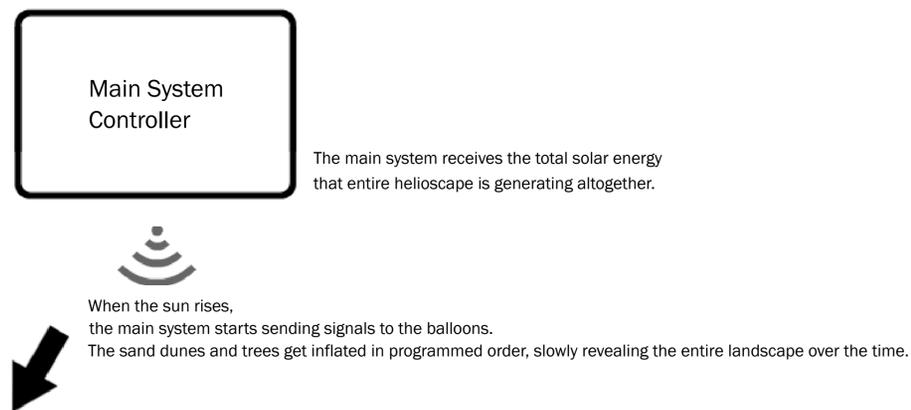
How helioscape is constituted.



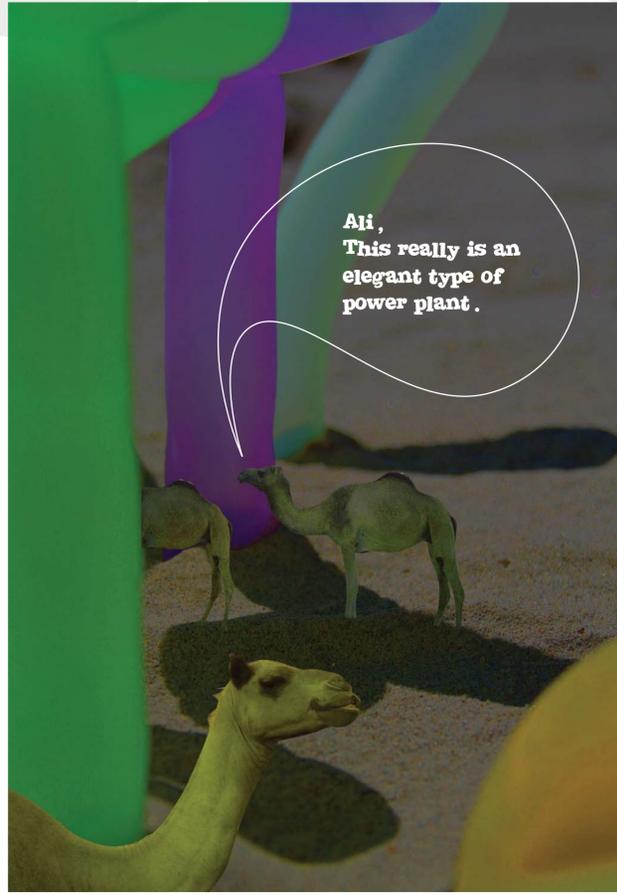
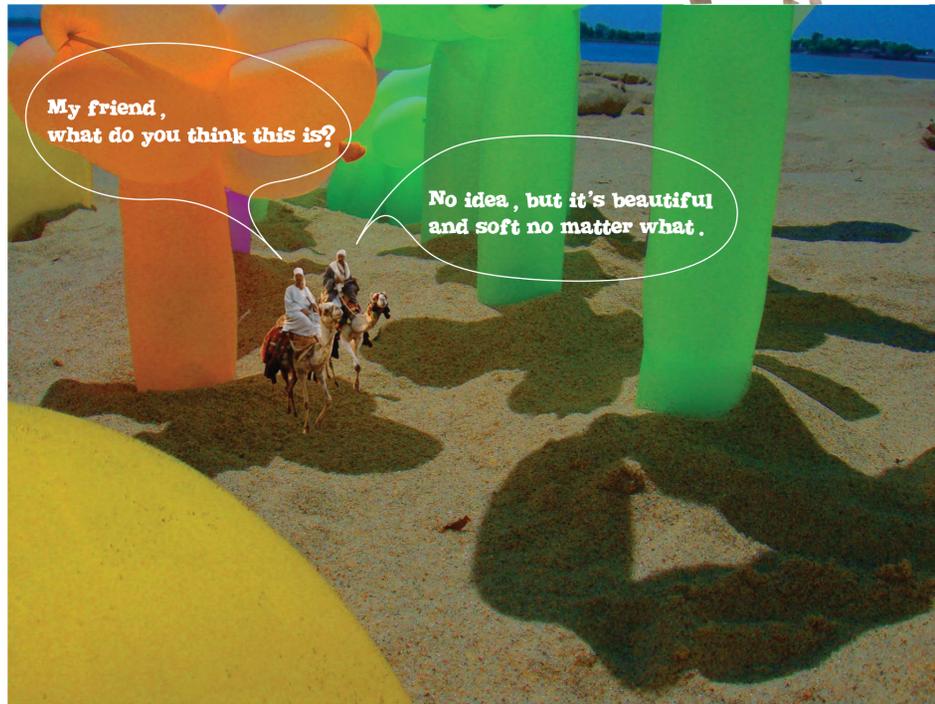
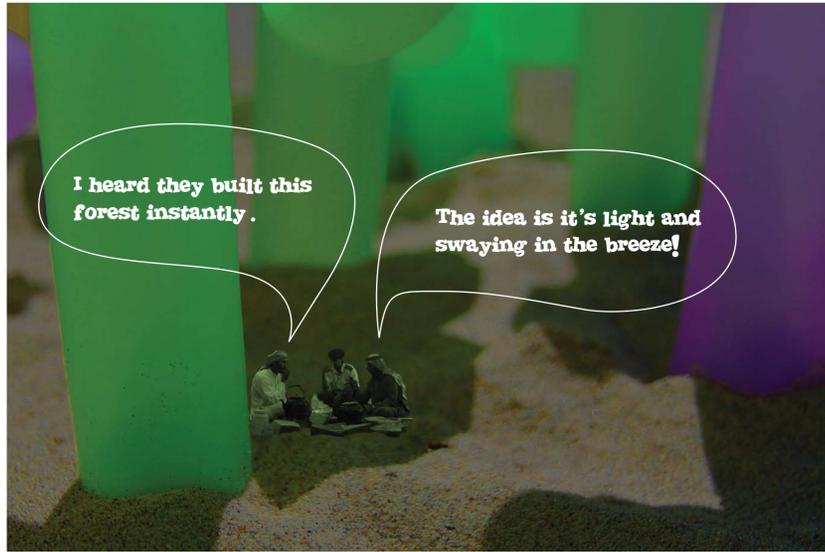
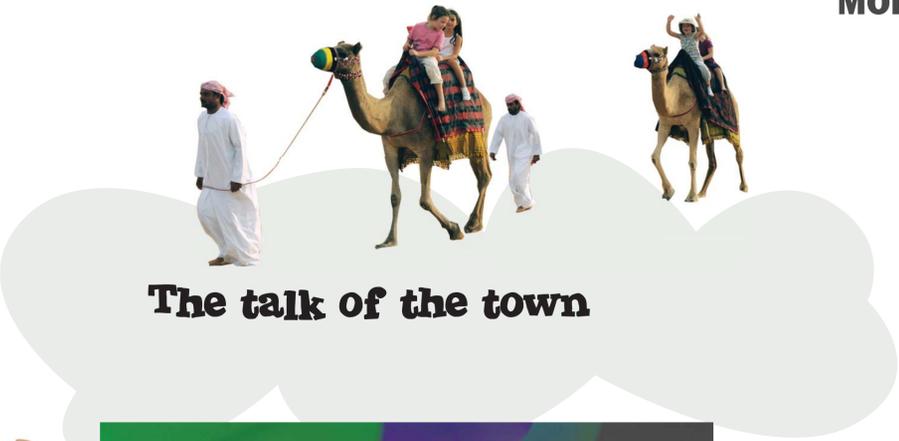
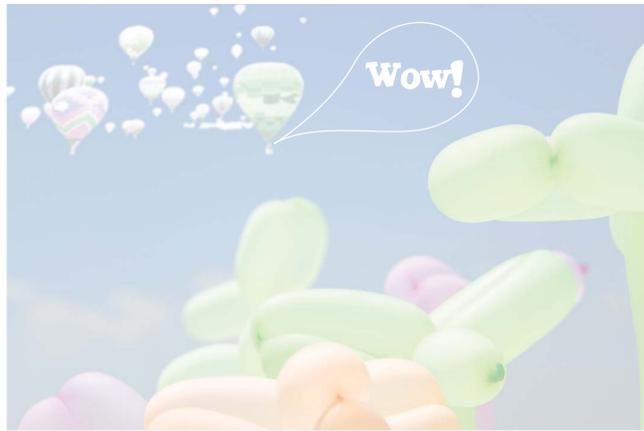
How helioscape works.



The solar cells on the top of each balloon create energy and send the energy into the main system.



Helioscape remains its shape a while after the sunset. It slowly deflates itself late in the night and takes a rest on the ground, until it reappears the next day.





SITE SELECTION



FORM & SCALE



Desert Bush



Cactus

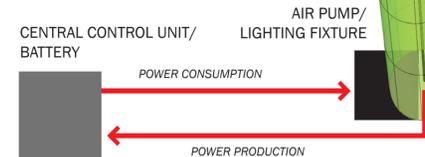
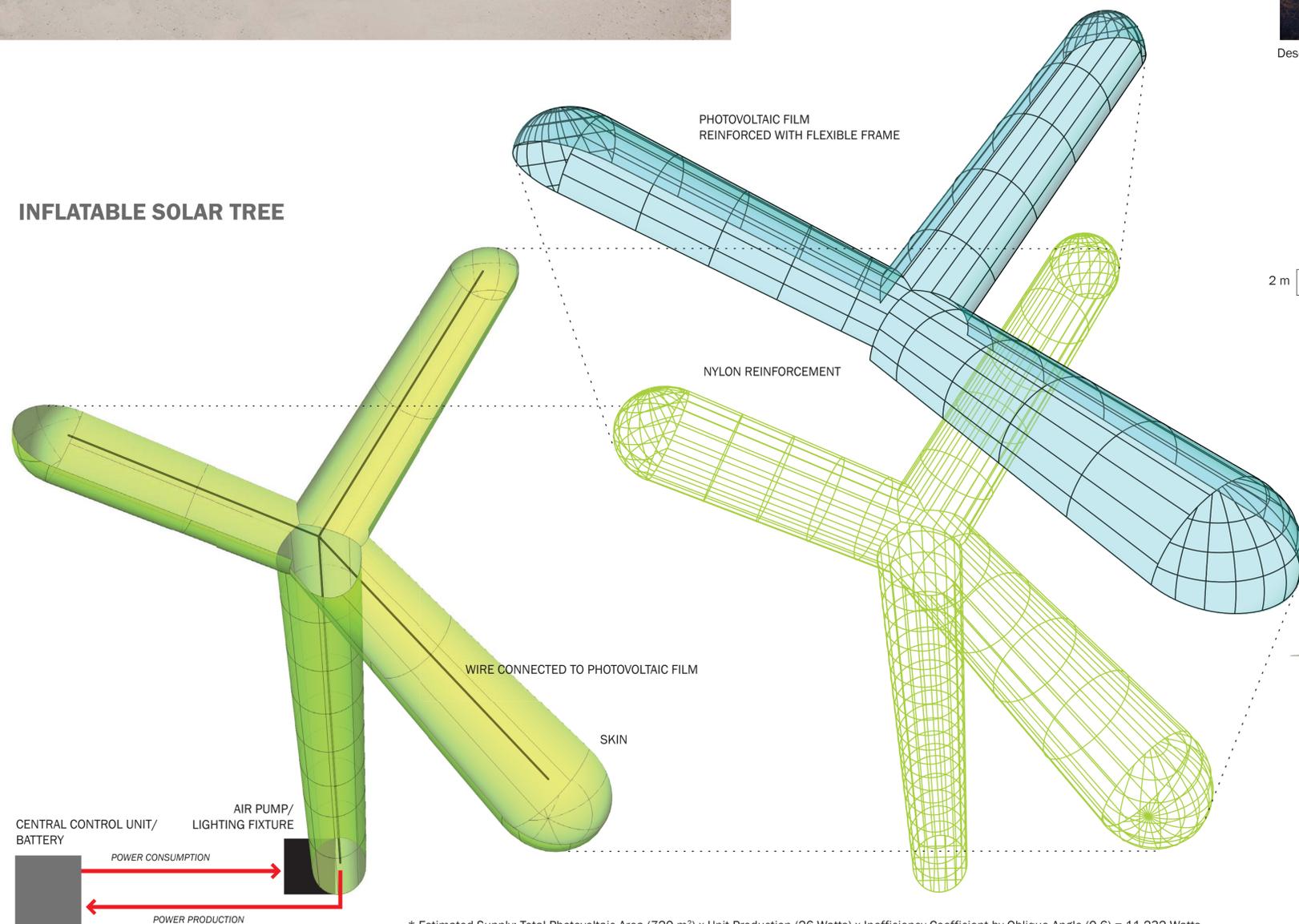


Oasis Palm

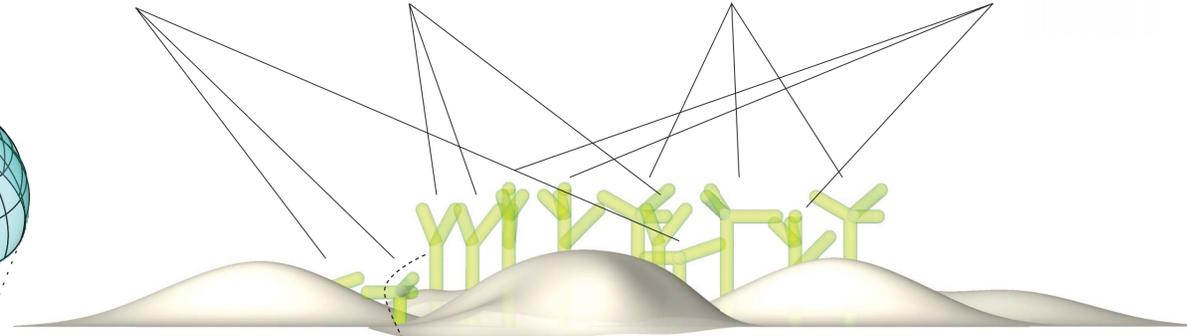
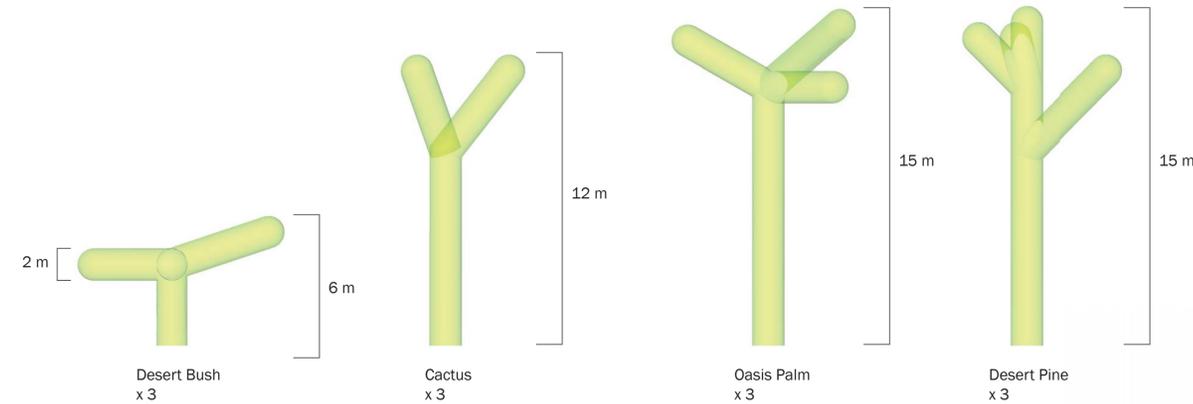


Desert Pine

INFLATABLE SOLAR TREE



* Estimated Supply: Total Photovoltaic Area (720 m²) x Unit Production (26 Watts) x Inefficiency Coefficient by Oblique Angle (0.6) = 11,232 Watts
* Energy Consumption: Air Pump, Nighttime Lighting



MATERIAL OF SKIN

