Loe

Loe is a unique living installation that allows the fusion of three renewable energies (plant energy, solar energy and wind energy).

Loe makes the production of clean and sustainable energy visible and alive.

I see Loe as an invitation to return to the roots like a contemporary totem pole for Masdar, the future capital of sustainable energy. This installation aims to be a flagship for research in urban green energy production.



plant-E

plant-E is a renewable energy that allows generating electricity with living plants.

A plant produces organic material through photosynthesis. Part of this organic material is used by the plant for its own growth, but not everything is used by the plant. This remaining part is excreted via the roots to the soil. In the soil, around the roots of the plant, bacteria break down the organic material. In this degradation, process electrons are released as a waste product. The P-MFC technology ensures that we can use these electrons as electricity.

This technology is growing and starting to be more and more productive. For the Installation, the plant-E technology would allow generating the energy for the light system of the installation.

wind turbin

The wind activates the sail that drives the pistons. It's a low-tech way to animate a high-tech device. Thanks to this energy, the installation looks in life. This system would probably allow creating 700 KWh per year if it's a windy year.

solar panels

The installation provides 300 m2 of solar panels places on rigid sails that can approximately produces 8000 KWh per year.





Loe

The structure would be made out of Alulinium

