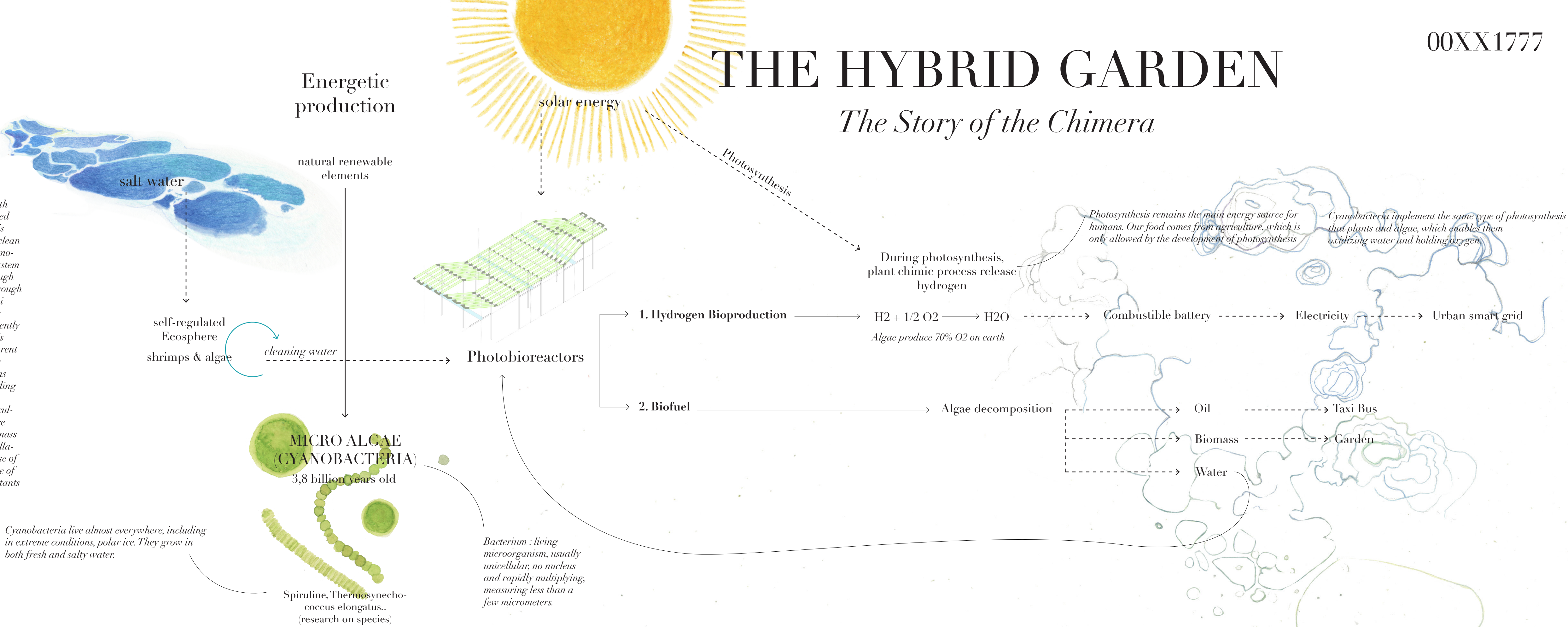


THE HYBRID GARDEN

The Story of the Chimera

The installation seeks to explore and develop further the methods used to produce energy with algae. The manufacturing of energy is connected in this case to a broader ecosystem. The algae is contained in tubes; the water, however, is kept clean and filtered by shrimps and tiny organisms, removing the need for a mechanical filter. The ecosystem cleans the water which in turn is directed through the algae's tubes. When the algae is formed through photosynthesis, it releases hydrogen. This chemical reaction can be transformed into electricity through its capture in batteries. It can consequently be connected to the local power grid. While this collection is happening, the micro-algae's different elements are separated by gravity. This process generates an oil, a biofuel, which can be used as fuel for boats. Biomass is also produced, providing an effective fertiliser. Further, the water used is recycled. Algae is an effective fertiliser in agriculture, improving the growth-potential, resistance and quality of the plant being grown. The biomass created by the algae will be reused in the installation's garden, the purpose being to avoid the use of pesticides and chemical fertilisers. The presence of plants can also purify the soil, absorbing pollutants like metals and oil residue.

When some microalgae are stressed, they become red. By testing different kinds of organisms, the color of the canopy will vary; experimentations will be directly visible on the installation.



ON THE SURFACE

Process story

To dip into the sea sustainable resources we need on earth : symbiosis land / sea

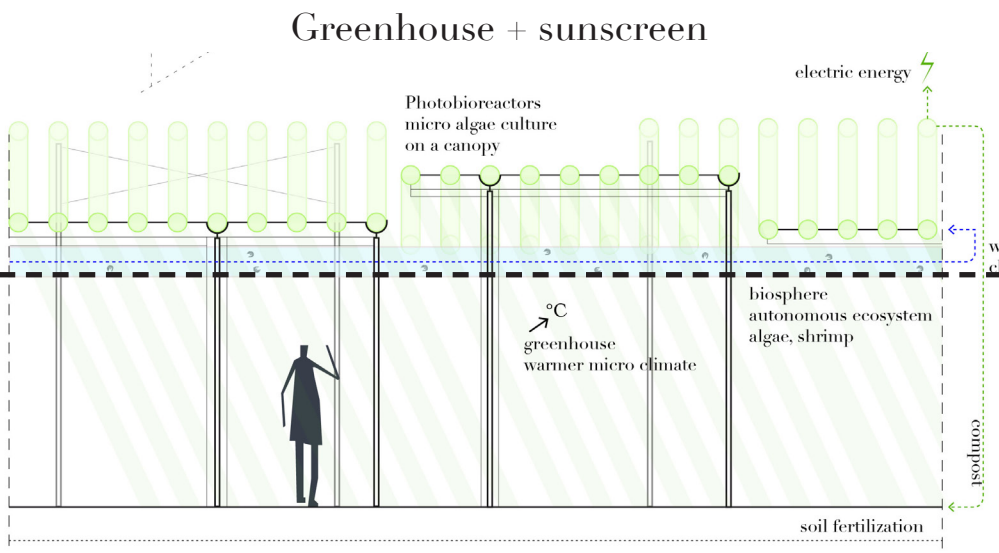
Raw plant cells are created by hybridization of a cell and a bacterium (endosymbiotic theory)

Hybrid plants (horticultural species)

UNDER THE SURFACE

Mythic story

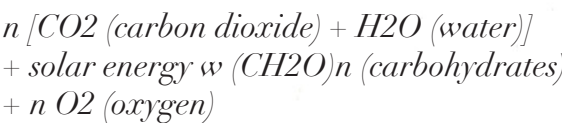
To create an underwater environment, by the installation of an algae canopy



Cyanobacteria are bacteria, organisms or animal or vegetable

The Marine Chimera

Some cyanobacterium are considered similar to the first organisms that have acquired the ability to oxidize water



Cyanobacteria are the source of all life forms releasing oxygen there billions of years

«Prehistoric» garden chimeric habitat

Nutritive garden (eatable algae and plants)

Fertilization

Recovery of the industrial site

Pleasure and experimental garden

Materia medica (medicinal algae and plants)

The Marine Chimera

Hybrid body : different genotypes that can reveal patterns on the skin (lines, blotches). Cell that mutates. Variegated foliage plants