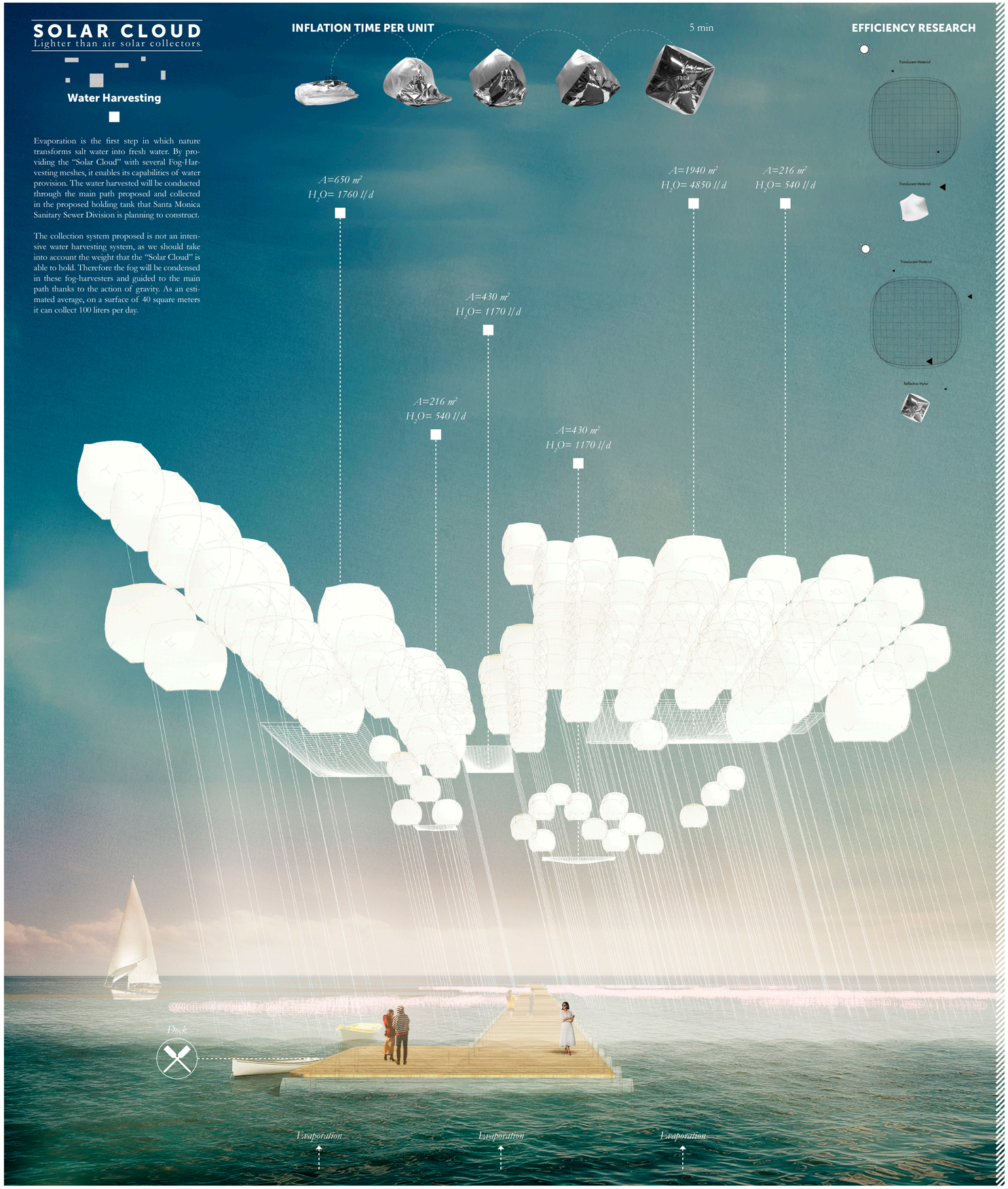
SOLAR CLOUD

Lighter than air solar collectors

Water Harvesting

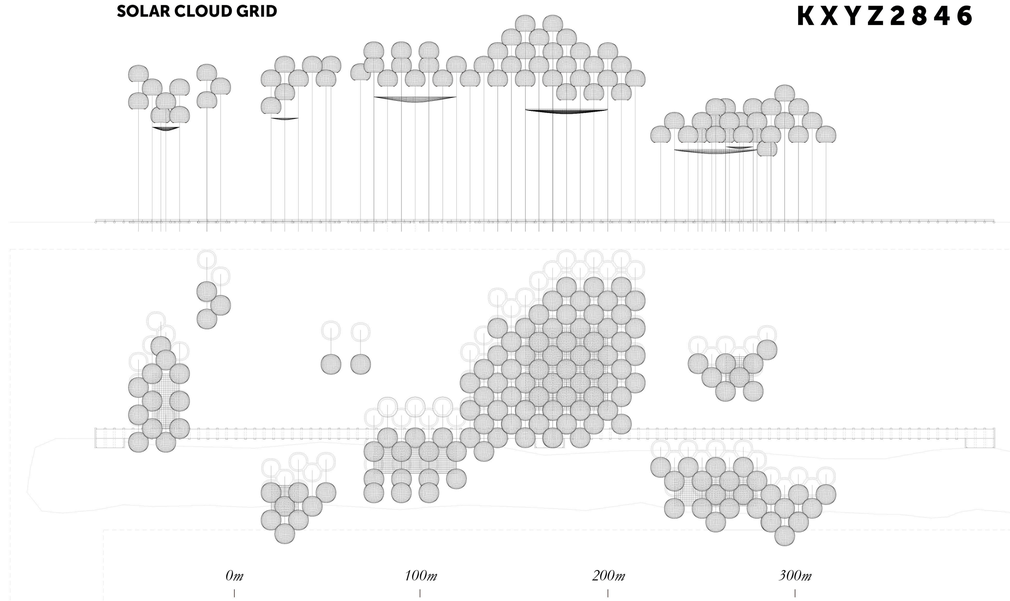
Evaporation is the first step in which nature transforms salt water into fresh water. By providing the "Solar Cloud" with several Fog-Harvesting meshes, it enables its capabilities of water provision. The water harvested will be conducted through the main path proposed and collected in the proposed holding tank that Santa Monica Sanitary Sewer Division is planning to construct.

The collection system proposed is not an intensive water harvesting system, as we should take into account the weight that the "Solar Cloud" is able to hold. Therefore the fog will be condensed in these fog-harvesters and guided to the main path thanks to the action of gravity. As an estimated average, on a surface of 40 square meters it can collect 100 liters per day.



SOLAR CLOUD GRID

KXYZ2846



MATERIALS

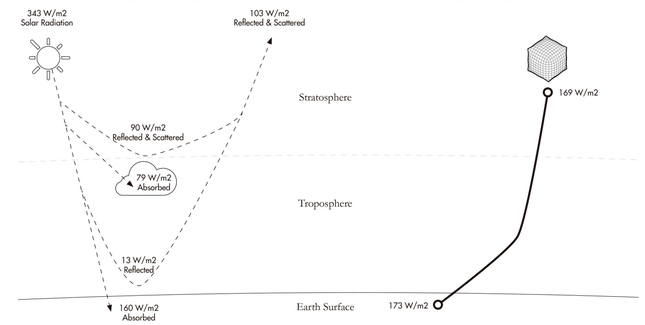
The cubic volume is decided for two main reasons:

- It is easy to join the seams formed in most edges.
- It has a good volume / surface ratio. This means that is able to hold a considerable amount of gas while having less surface. The best volume is the sphere, but is more difficult to fabricate.

Each cube has a face of 56,25m2, formed by edges of 7,5m.

The materials are chosen due to their resistance, flexibility and .lightness. For this mockup was decided to use a High-density polyethylene (HDPE). The units are gathered with a net and anchored with fishing wire.

ATMOSPHERE



EFFICIENCY

MOCKUP 1:6

EMERGENCY

GROWTH