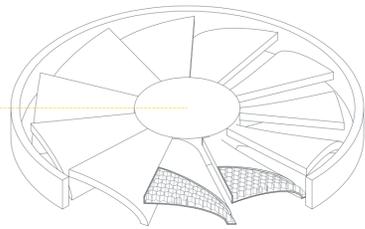
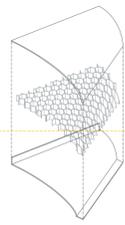


contracted plan
1M:150



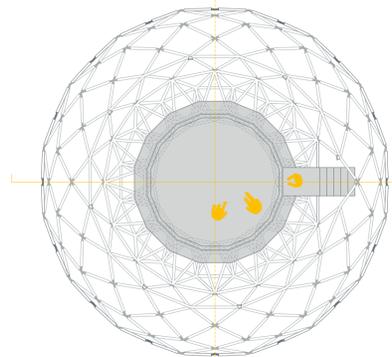
lightweight turbine with
honeycomb structure core
1M:20

The main idea of the "bubbles" is to combine sun and wind in order to generate energy, through a device that is capable of containing human activity. The mechanisms of the solar updraft tower (sun) and the bellows (wind) are reinterpreted and combine in these resulting structures. A light structure out of 1,2 m long rigid paper tubes joint with flexible corrugated plastic elements, covered by a plastic outer skin, allows the whole to contract and expand between maximal positions limited by steel cables. This way the "bubbles" adapt to the climate conditions:

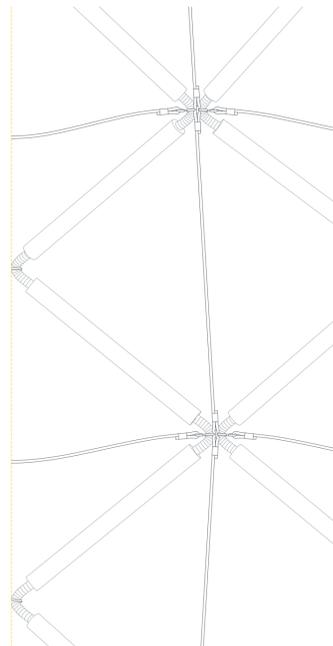
No wind: The structure is expanded, exposing the maximal outer surface, working as a small scale solar updraft tower, in which warmed up air flows upward activating the turbine at the top.

Wind: the wind impact on the outer skin forces the structure to contract, this way reducing its volume forcing air to go out through the turbine.

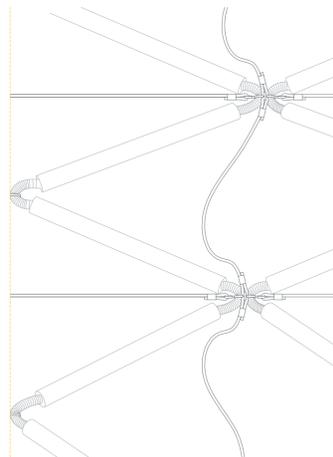
The interior becomes a changing space where people can meet, stay, play, learn and experience the elements.



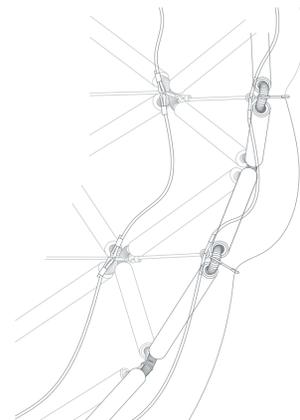
expanded plan
1M:150



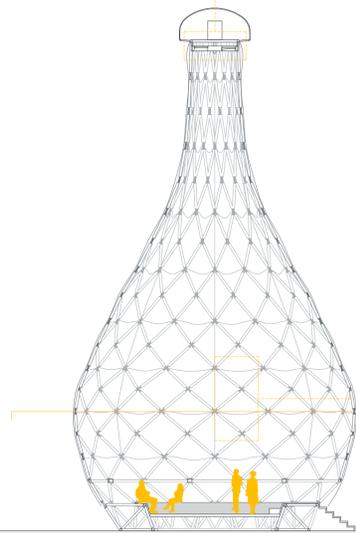
contracted detail
tenses vertical steel cables
1M:20



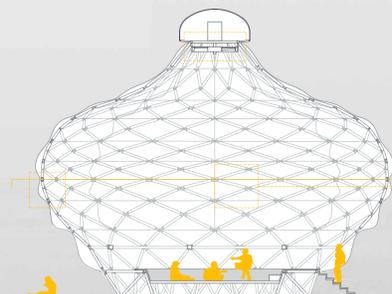
expanded detail
tenses horizontal steel cables
1M:20



expanded detail
outer skin
1M:20



contracted section
1M:150



expanded section
1M:150

