

The Ark



Winner of the contest “**Radical innovations in hospitality**” 2011

Submitted by Alexander Remizov (Russian architecture)

“The Ark” is...

- a bioclimatic building with independent life-support systems that can be built on land or sea
- “The house of

future”



Can be constructed quickly and withstand environmental disasters through its structural integrity



Architectural features



maintenance of security and precautions against extreme environmental conditions and climate changes



protection of natural environment from human activities

The Ark project makes an attempt to answer these challenges of our Time



Structure

Timber arches



Steel ropes



The framework is covered with a special foil



- *Strong*
- *Highly transparent*
- *Self-cleaning*
- *Recyclable*
- *More durable, more economical and lighter than glass*

Structure

*The building has a
cupola form*



*An optimum
relationship between
the building's volume
and its outer surface*



Special metal
profiles



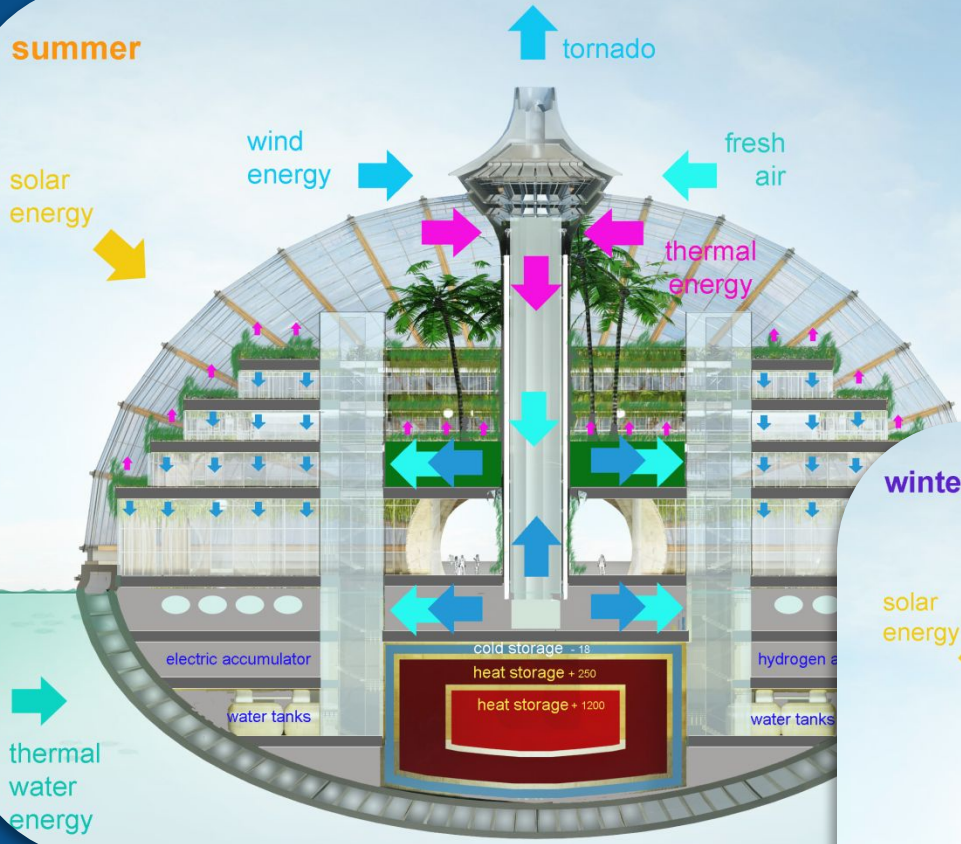
Solar collectors for water
heating + gutters intended
for collecting rainwater
from the roof

Energy system

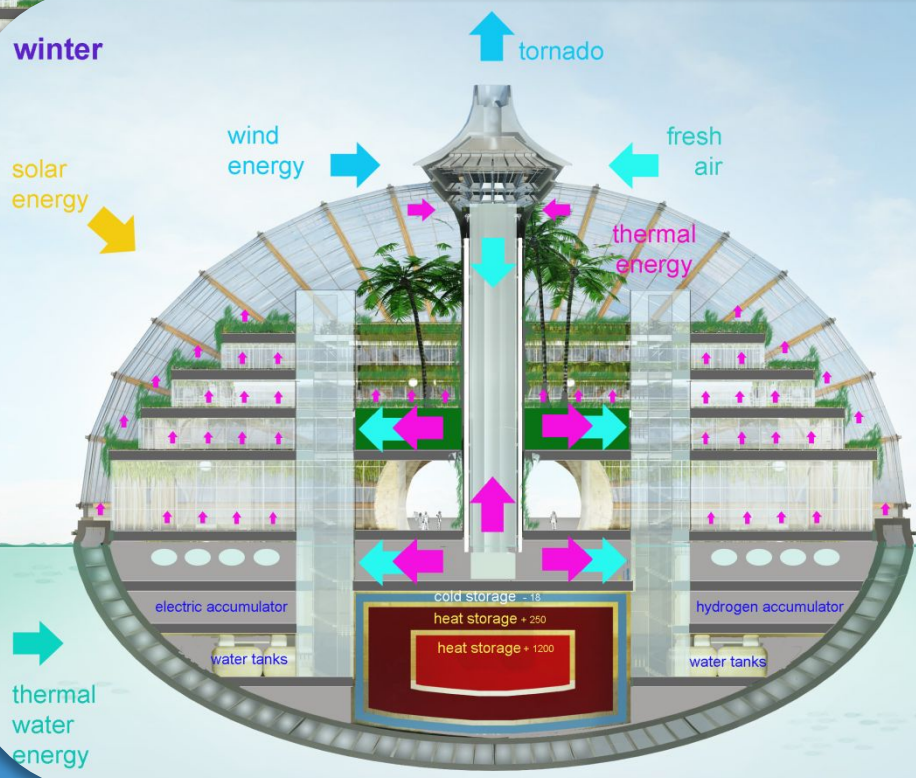
Wind power generator and tornado generator are at the central bearing

The form of the building is convenient for placing on it the photoelectric cells at a necessary angle to the Sun

summer



winter



The form of the cupola assists to agglomeration of the warmed air in the upper part

The main purpose

- The building could be constructed in **different climatic zones and in seismically dangerous regions**, because the structure of the basement represents a shell without any ledges or angles.

- A stressed structure of arches and ropes permits to distribute load along the whole bulk in **case of earthquake**



- . The structure of the building permits it to float in case of water leveling up in the World Ocean

Planting of greenery

- All the plants are chosen according to principles of compatibility, illumination and efficiency of oxygen producing, as well as with the aim of creating an attractive and comfort space.



Thank you for your
attention!