Spacing SuRfaces:

* *Technology*

In this art work, we have used photovoltaic panel technology which could capture the sunlight and convert it to electricity.

* *Nameplate capacity*

220 PV panel.

Each panel: 2m\*6m

Total area of panels: 220\* 12 m2= 2640 m2

Every square meter of these panels could provide 5kwh/day electrical power.

2640\*5=13200 kwh/day

13200\*365= 4818000 kwh/year

* *Dimensions*

Each box has 110 m length and 18 m width and 35m height.

Each steel frame has 32m length and 35m height. 60 steel frame have been used in this design.

Each large glass: 8m height\* 3.6m length.

Each small glass: 2m height\* 3.6m length.

* *Material*

Recycled plank, recycled glass, recycled stainless steel and PV panels.

*Estimated cost*

PV panels’ total cost: 158000 USD

Other Materials + labor costs: 465000 USD

Total cost: 623000

* *Environmental impact summary*

This farm aims to produce about 4,800MWh of clean electricity annually, thereby offsetting nearly 4,000 tons of carbon emissions per year - equivalent to taking1000 cars off Abu Dhabi’s roads.

The usage of recycled materials could help us to decrease the negative ecological impacts of such a huge installations.

White box walls is made from recycled planks to reduce the ecological footprint of this architectural installation.. The roof of the box is covered by a large number of photovoltaic panels which are similar in size and shape. This issue has a significant impact on the reduction of the total cost of the project.

On the other side a transparent box is designed. The walls of this box are made from recycled glass to have less negative effect on the environment. The roof of this box is similar to the another box which has been lacated on the other side of the dedicated site. The scenario of this box is exactly opposite of the white box. Colorful shadows have filled the interior, being visible from exterior.

Having been respond to the dedicated site characteristic, Spacing SuRface project is composed by three specific spaces which every one has its own character. On the one side a white translucent box is lacated. On the other side a colorful transparent box is provided. A bridge connects these two volumes to each other , strengthening our scenario and responding to the street which intersects the siteFurthermore, this architectural installation could merge renewable enregy infrastructures such as photovoltaic panels with beautiful scenes to sensitize people to the future of our planet.