## SOLAR CLOUD



The Bay

iew construction

Lifted landscape enables multi-directional view corridors, transforming St Kilda square into a new scenic destination with abundant parking space for both private and public transportations



Considering the potential of having large outdoor events and leisure activities on site in the future, the key of maintaining this place as an all year around popular one is to prevent over-heated land surface, more directly over-heated air during summer peak days. The scope of the design extends to the bay area, absorbing the water from the sea as a neutral and free media to exchange the heat





The process of the heat/energy exchange through capillary flows on site will be conducted through collective intelligent emerged from the individual performance of the solar receiver embedded at the SOLAR CLOUD 's family members. The rest of the energy will be transformed and stored in plants (battery) underneath the lifted landscape, which will support the neighborhood as extra electricity plan.

The annual kwh generated on site is estimated as: 3145716 kwh/y = 5130 m2 x 4.2 kwh/m2d x 365dx 40%

## Sustainable strategy

The site sits in the middle of famous St Kilda beach in Melbourne, a coastal city with a temperate oceanic climate and is well known for its changeable weather conditions.

While in recent years, extreme weather conditions of high temperature in the summer days increases in both its frequency and duration, which gives huge pressure to the local new sustainable powering system converted from non-renewable energy resource (such as coal). The position and design principle of the sustainable strategies to this specific land art will adapt to this new challenge, to minimize the energy consumption through passive cooling system while to maximum the energy generation through intelligent solar clouds.

