**PROPOSED LAND ART GENERATOR INITIATIVE (LAGI) AT MASDAR CITY, ABU DHABI**

**Project introduction**

As a Land Art Generator initiative (LAGI) within Masdar City, Abu Dhabi, the architect decided to us a familiar features and object known to the people to have a visual and physical interaction with the community.

**Design concept and development**

The general concept is to fuse ancient artifacts in to contemporary architecture.

* Hafit: The main building takes the form of the Hafit with all its characteristics of the domed roof and circular body around the round dome including some extra futures i.e. vertical and horizontal circulation and extras fenestration.
* Khanjar: This art is house in the Hafit thereby giving a surprise factor for anybody that goes in. The khanjar allows people to climb up via a spiral stair to a viewing deck for proper visual experience of the art.
* Date palm tree: The palm tree is serving not just as a land mark art but as a support for the pedestrian bridge across the road. The palm tree will be big enough for the pedestrian bridge to suspend from it.
* Pedestrian bridge: The pedestrian bridge will be suspending from the big palm tree also it will have a glass floor for all the visual experience. The pedestrian bridge is the ribbon that is connecting all the facilities together.
* Main road: The main road will pass through the art project so that its magnificence can be appreciated by commuters, large open space for free social gathering and movement.
* Foot path: there is a central foot path spine that runs across the land art

**Design philosophy**

An abstract design of green sustainable architecture in use with contemporary architecture.

* Free movement of occupants taking in to consideration
* Free flow façade
* Passive energy efficiency
* Active energy efficiency

To maximise natural ventilation/thermal comfort, Openings are provided on all sides of the art structure to allow for cross ventilation effectively through the creation of abundance openings spaces to both public and circulation spaces, including lift lobbies, escape stair toilets.

**Chart**

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| No. | ITEM | PROGRAM | SOLUTION |
| 1 |  | Compost bin | On-site composting allows building users to be involved and educated in organic waste processing and to contribute to the building landscape sustainability |
| 2 |  | Shading device | trees and the art structures them self |
| 3 |  | Natural ventilation | Natural ventilation through stack ventilation and cross ventilation at circulation and public spaces |
| 4 |  | Day lighting | More than 75% coverage of building illuminated by natural daylight through large and small openings and skylights |
| 6 |  | Lighting | Zoned lighting with sensors. Energy efficient LED |
| 8 |  | External views | More than 75% of building Area has external views and provides human comfort |
| 9 |  | Plants and trees | Trees and green lawn at both interior and exterior |
| 10 |  | Photovoltaic | 25kWP PV offsets 100% of building energy consumption |

**Land art facilities**

* Photovoltaic solar panel roof on bought main building and gazebo
* Soft and hard landscape
* Water body
* Horizontal and vertical circulation i.e. stairs, spiral stairs, pedestrian and goods tramp
* A viewing tower
* Suspended pedestrian bridge
* Neon light artificial palm tree
* Public gazebo
* The main building

PEAK OUTPUT: 200-600 kWp

ANAUAL OUTPUT PER HOUR: 7,800 kWh