

The Green Planet

LOCATION
Dubai, UAE

CLIENT/OWNER
Meraas Holdings, Dubai

ARCHITECT
Grout McTavish Architects

Brad McTavish (Principal)
Clive Grout (Principal)
Alex McCumber
John Jones
Andrew Carruthers
Toshi Suzuki
Kahn Tran
Michelle Ventresca

CONSULTANTS

SMEP Engineering /
Code Consulting:
Buro Happold Consulting

Exhibit & Interpretive
Design:
Gallagher & Associates

Habitat & Zoological
Design:
Studio Hansen Roberts

Aquarium Design:
Jim Peterson Design
Associates

Life Support:
Ted Maranda & Associates

Horticulturalist:
Rob Halpern

Lighting: CD+M

Architects of Record:
U&A, Dubai

Project Manager:
Samsung

Facility Operator:
Zoo Oceanarium

YEAR COMPLETED
2016

SIZE
60,000 sf enclosed area

Cost
Not Available



The Green Planet Dubai is an immersive Science Center attraction based on the Equatorial Rainforest's of the world. The architecture reflects the geometry of a fragile Origami cube that shields and protects a living Biome within a glass cylinder. The exterior cube houses the support spaces required to sustain a living environment designed to accommodate over 3,000 species of tropical plants, mammals, insects and fish within the desert setting of Dubai.

Its mandate is to provide the people of Dubai an opportunity to experience and gain a deeper understanding of the fragile ecosystem of the Equatorial regions and how these regions of the world need to be protected for our sustainable future.

The concept for the visitor experience was developed to show how the various species that inhabit the rainforest can be found in the vertical zones of a Kapok tree; from its flooded river bank setting to its upper canopy.

Visitors are taken on a journey through the various habitats of this verdant tropical forest in a series of experiences starting from a freshwater Amazon aquarium at the base of the biome to the aviaries 30meters above. Upon the completion of the initial immersive aquarium experience, visitors ascend via high speed lifts to the upper branches of the Kapok tree from which they descend down a series of spiral ramps within the biome.

In addition to accommodating 750,000 annual visitors, The Green Planet includes an education learning center with laboratories and classrooms where students attend class and conduct experiments both in class and within the Biome in order to gain a deeper understanding of the Biological Sciences and habitat preservation.

The building was designed to provide a constant tropical environment able to support its inhabitant in an outside environment that can experience daily temperatures reaching 52c. The building was designed to limit its dependence on the available resources of the municipality and features advanced life support and filtration systems, passive humidification of the biome and harvesting condensate, grey and irrigation water in order to support and recycle water for use within the facility and the rainforest environment.

Completed in 2016 Green Planet Dubai has emerged as the top education-based visitor attraction within Dubai providing an immersive educational experience of the fragile Ecosystem of the World's rainforest fulfilling its mandate to inspire the youth of Dubai to be better engaged in supporting and encouraging a more sustainable future.