

GreenBIM

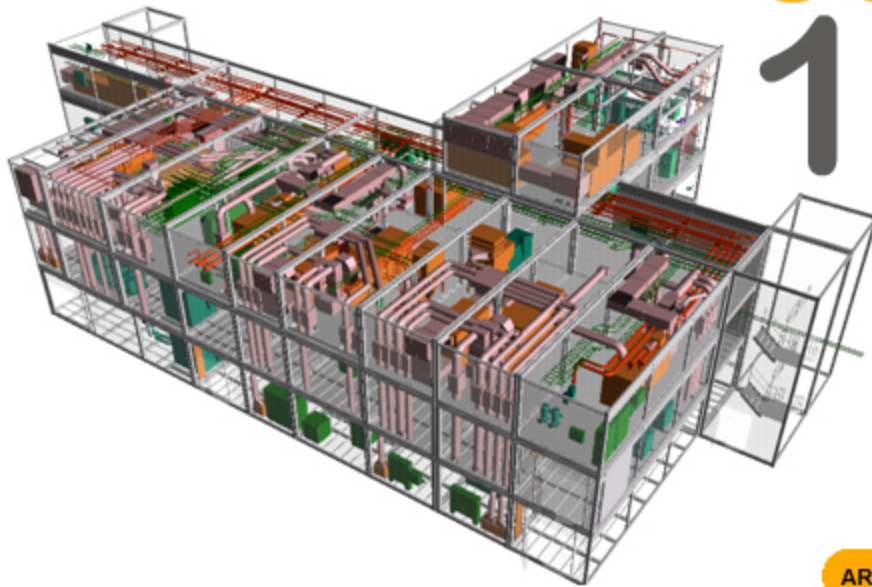
SHOW DETAILS



LOCATION: Prince Ali Office, Abu Dhabi, UAE

Humidity
86%

CO²
145 mml/l



ARCHITECT DESIGN

CONSTRUCTION

MANAGE

GREEN BIM

Design application for creating eco-efficient solutions

Team Electro'n'Roll

Mari, Gill, Shaheryar

User Case



- * Swedish Architect
- * Works in Global Construction Company
- * Uses BIM Software Tools
- * Next Task: Create an eco-friendly Bureocratic building for a Prince
- * Prince participates in Green Initiative UAE

Tasks

- * Design an eco-friendly building on the BIM software.
- * Do surveys of various spaces for comparing the different parameters (temperature, humidity, Co2 Emission) and adjust the design.
- * Refine the design at the construction sites.
- * Verifying and mantaining the constraints when the building is ready.

Purpose

- * To create eco friendly BIM design solutions for home builders, architects, janitors, construction managers.
- * To analyze data from different spaces according to their eco friendliness.
 - * No of people, comparison between different spaces in 3d view, affects on different parameters.

Applications

- * For placing “smart spaces” in airports, hospitals or other places .
- * To consider different parameters according to the purpose of building. Eg; data centers, museums, hospitals.
- * Data Centre Vs Museum: amount of people, number of machines, humidity levels, temperature, natural cooling mechanisms etc.

GreenBIM



LOCATION: Prince Ali Office, Abu Dhabi, UAE

STATUS: **Library 2B11**

* CO₂: 152 mml / l

* Humidity: 82 %

* Temperature: 26 C

* Oxygen: 11 mml / l

Outdoor environment:

* Humidity: 92 %

* Temperature: 32 C



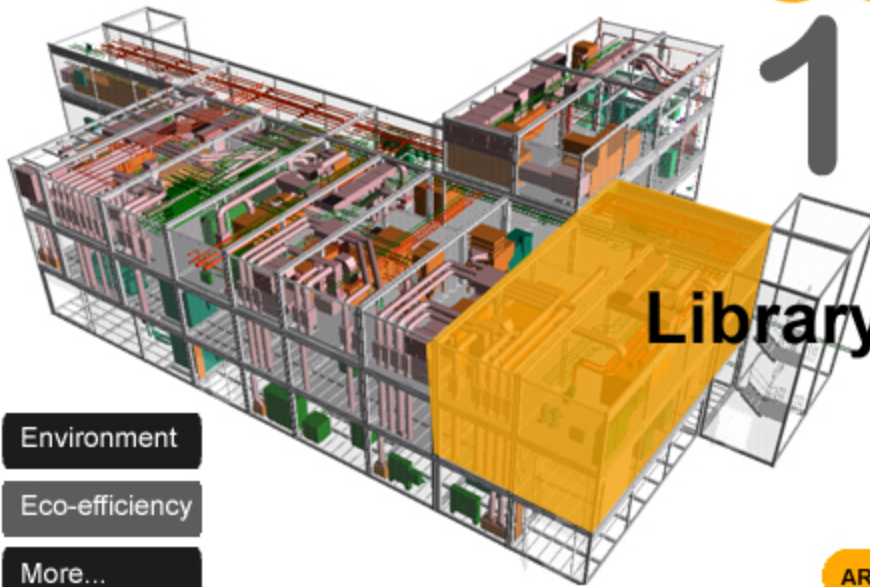
Humidity

82%

CO²

152 mml/l

Library 2B11



Environment



Eco-efficiency



More...

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Data comparison from different spaces in different days

- * Time Stamp 22.05.2014 02:20 - 22.05.2014 02:21 9m
- * Co2 390
- * Humidity 47
- * Temp 26o
- * Time Stamp 25.05.2014 02:20 - 25.05.2014 02:21 am
- * Co2 690
- * Humidity 53
- * Temp 25o
- * Time Stamp 25.05.2014 03:20 - 25.05.2014 03:21 am
- * Co2 587
- * Humidity 47
- * Temp 25o
- * Time Stamp 25.05.2014 12:20 - 25.05.2014 12:21 pm
- * Co2 473
- * Humidity 40
- * Temp 28.2o

Future

- * ZERO net energy homes.

 - Using pipe on top of the roof for heating water

 - Using solar panels

- * Modular Building where you can adjust the windows and doors according to different parameters.

- * Feedback from the end users can change the design and create and new parameters.

THANKS

