RAFAA architecture and design: solar city tower, rio de janeiro

the project under consideration will be located in the bay of the city of rio de janeiro on the cotonduba island, which is the obligatory approach for aircraft landing and will comprise a vertical structure which will seek to become a symbol for those arriving in rio, creating an image potent enough to enable rio to triumph in its bid to host the summer olympics in 2016. the challenge, therefore, consisted of designing a observation tower which will become a symbol welcoming all those who visit rio de janeiro, whether they arrive by air or sea.
the project consists of a solar power plant that by day produces energy for the city respectively the olympic village. excessive energy will be pumped as seawater into a tower, by night, the water can be released again; with the help of turbines, it generates electricity for the night. the electricity produced can be used for the lighting of the tower or for the city. on special occasions, this 'machine building' turns into an impressive wonder of nature: an urban waterfall, a symbol for the forces of nature. at the same time, it will be the representation of a collective awareness of the city towards its great surrounding landscape. via an urban plaza located 60 meters over sea level you gain access to the building. through the amphitheatre, you reach the entrance situated on the ground floor.

both entrance area and amphitheatre can serve as a place for social gatherings and events. the public spaces are also accessible from this point on. the cafeteria and the shop are situated beneath the waterfall and offer a breathtaking view. the public elevator takes the visitor to the observation decks and the urban balcony. the administration offices can be reached directly from the foyer. its inner circulation is organised by an own entrance and the elevator. the semi-public spaces are located in the back area of the building; thus, they can be used separately. a retractable platform for bungee jumping is located on level +90.5. long distance observation can be done from the observation deck on level +98.0. the urban balcony is situated at the top of the tower 105 meters above sea level. here the visitor has a 360° view of the landscape and can experience the waterfall while walking over the glass sky walk.
entrance of the tower
comments:

NO!!! I’m from Rio. Save energy is a good idea but we don’t need any ugly/landscape destroyer “symbol” like this. The city is itself a symbol. I’m sorry...

Paulo Neto 05.19.10

This project would never pay for itself. Ever.

Daniel 05.19.10

studied idea

MM 05.19.10

I am thrown off by their use of “excessive energy” Can that energy not be used by the people, or is it just hogging it all for pumping water?

donny salami 05.19.10

Hahaha ótima ideia!!! vai rolar sim!!

DAN 05.19.10

This idea holds no water with me I’m afraid. You could say it just won’t float.

Silly - very very silly.....

Pieter 05.19.10

Horroroso!!! Totally agree with Paulo Neto.

Gustavo Morcelli 05.19.10

How about decontaminating the Guanabara Bay before building any monstrous architecture? The Island looks better untouched. Plus, the best way for Rio to show it’s competence would be by recovering its environment! Let’s see that first...

TS 05.19.10

f*kin awnsOme

Rosso 05.19.10

This is illegal ! ! !

This Island is a protected wild life area. There are endangered species of birds that live on it. Why build on it at all?

It’s protected by law, as shown below:

A APA do Morro de Leme, Urubu e Ilha de Cotunduba foi criada pelo Decreto Municipal nº. 9.779 de 12 de novembro de 1990 e regulamentada pelo Decreto Municipal nº. 14.008 de 05 de julho de 1995. Segundo a
 regulamentação, a ilha está inserida na Zona de Vida Silvestre – área de uso restrito, com conotação de reserva biológica, destinada à salvaguarda da biota nativa através da proteção do habitat de espécies residentes, migratórias, raras, endêmicas ou ameaçadas de extinção, bem como à garantia da perenidade dos recursos hídricos, das paisagens e belezas cênicas e sítios históricos.

RAFAA architecture and design. This is such bad publicity for you! For not considering environmental impacts... or even, it's legality! Even worse for Rio for promoting this stupid competition

I think it is kind of cool.

I feel this so intrusive!

I like the idea, but hate the building... Rio doesn't need that ugly fake waterfall.....stop them pleaseee

Great idea and fantastic design! For all the people concerned with nature and the landscape - come down, its a concept and for that it is strong. Good job RAFAA!

bizarre!!!

This is something that Rio absolutely does not deserve. I cant believe someone designs such a tremendous building in a place like Rio. What about the image "over the clouds"? That would never occur. If you guys went to Rio once in your life, you would know what the experience of going to the Christ statue in a cloudy day. There's no blue sky up there. Architects should travel more to Rio before thinking about a proposal to that city. To understand what really goes on there. Energy generated from that pumping/releaseing? That's ridiculous in a country that even sells energy to its neighbors and invest billions through BNDES (Bank of National Development) on serious energy generation. Pumping water from the sea? Are you nuts? Collect water from the rain, my dear friends. If you ever experienced a tropical in Rio, you would understand how thick a rain drop is over there. Not to say that 200 people died in the last flood. So don't waste money on energy to suck water from the ocean. Unless you want some fishes to go flying on the waterfall, which could cause an accident with the guy on the bungee jump. He could slap his face on a Garoupa fish while boingboinging. An artificial waterfall in Brazil, yes, humaho! Next RAFAS project: design an artificial beach halfway between Copacabana and Ipanema.

Whow! That is a cool design, would really help to bring the olympic message to the people. And also improve the infrastructure of the city. Hope its gonna be build very soon!

They should use the investment money to feed the million of Brazilian poor people! Brazil is not a poor country but a country with a lot of poor people!

er...I think most of the commenters missed the point of pumping sea water. The sea water would be used to generate hydroelectricity as well...

beautiful set for some Bladerunner part II. Architects never delivered so many film sets as nowadays, but in an unconscious way. I'd be more conscious about it, and aim dealing with hollywood instead of pretending this is buildable architecture. cheers and congrats.

Com o custo desse ambicioso projeto tenho certeza que é possível reduzir a pobreza no Rio de Janeiro e investir em saude. O povo Brasileiro nao precisa de uma torre para melhorar a aparência de uma cidade, precisamos de projetos para melhorar o nível de vida das pessoas.
Energical non-sens

Fran 05.22.10

Have they fixed Rio's telephone system yet? Last time I was there, it was so overloaded, human messengers had to be hired to deliver messages. Are there still slums next to McMansions?

Wait until there is a misfunction in one of the components, and then this house of card will come tumbling down.

Better to fix the missing pieces in the mosaic pavements.

lightvixen 05.22.10

Maybe you could you put this stuff in the middle of a city but not in the coast....

Alvaro 05.22.10

This is definitely too artificial. Great design like in a James Bond movie, but not suitable for a nature reserve!

Just imagine what it will look like when there is no water flowing..... ugly.

And how much surplus energy are they talking about? Sounds like an excuse to justify the huge expense of money.

I have never been to Rio, but this would not help attract my attention. I would rather see the beautiful beaches Rio has to offer and see the birds in the nature reserve.

Andrea 05.23.10

I think it would look pretty cool. On MARS!!

copernicus 05.23.10

This is amazing!

I LOVE the ideal it's very advance and well though conceptually! I'm recently back from Rio: I would love to see a real new symbol in the city that has been chosen for the Olympics games and Football WC in 2014.

Monica 05.24.10

As all projects it has positive and negative sides. I read all the comments, people from Rio saying that it's ugly or the money must be used for our Health System. Well, I am also from Rio and I see this project as a very unique idea, and as one people normally don't want to see it done. The Eiffel Tower had also problems and nowadays it is the symbol of Paris and France.

I would also like to see Rio without slums, the Guanabara Bay and the Jacarepagua lagoons cleansed, an efficient public transportation, the subway plan covering all the city - and not only the downtown and the south zone ..... But let's face the truth, this will never happen. Not for now.

So, for me, this is a great idea. If this will be done someday? I really have my doubts.

Ernesto 05.24.10
DESIGN AEROBICS - EARLY COURSES (JANUARY 15 - MARCH 15, 2011)

SELF PROMOTION

how to present yourself in a creative world. this course examines different approaches to make sure you, your talent and your work are brought to the attention of the people that ‘matter’ to you.

PACKAGING

from mother nature to the latest breakthroughs in man-made materials, this course looks at packaging from design to manufacturing and everything in-between.

CURRENT DESIGNBOOM COMPETITIONS
