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SWI 2012

A little bit about Bartels....

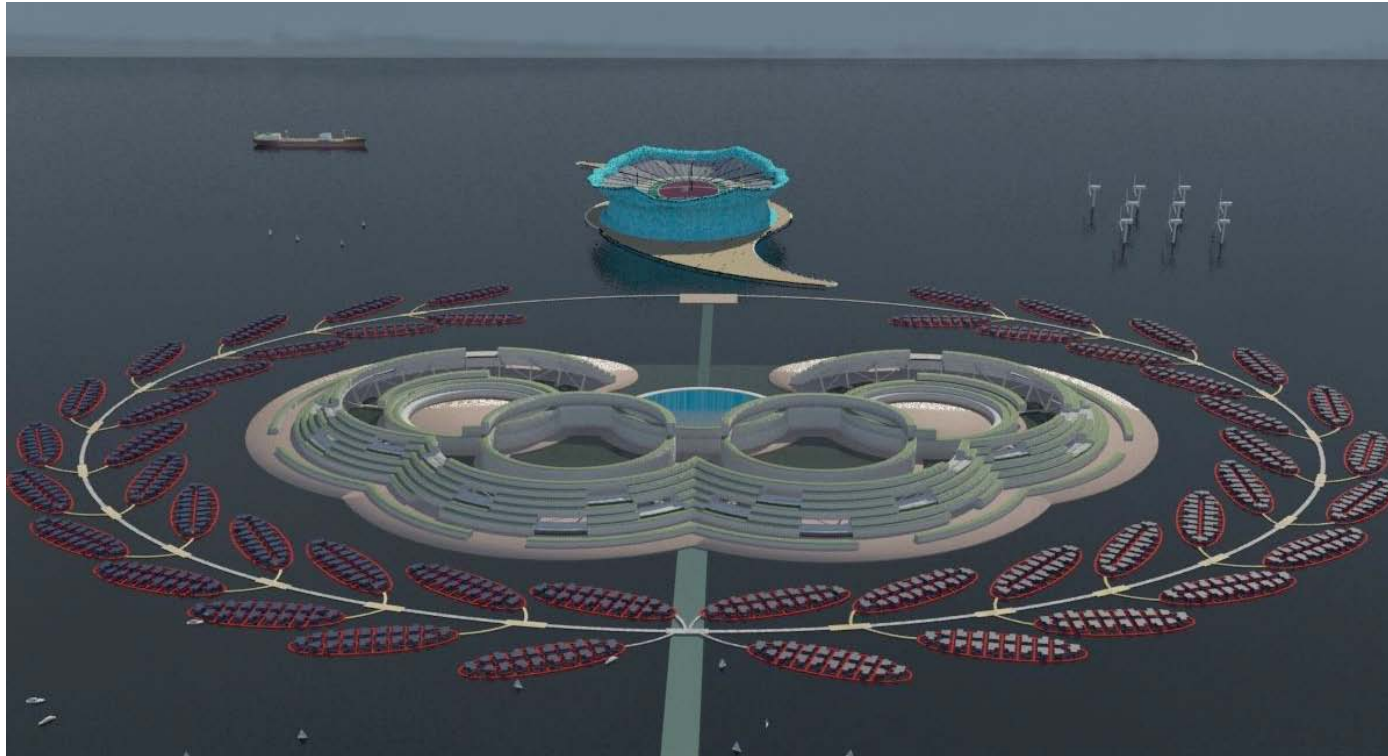
- Consultants in structural and civil engineering
- 40 years experience
- 8 offices in Holland (strong local connections)
- Offices in Ireland, Germany, Poland, Ghana, Turkey and Lebanon

We advise on...

- High rise buildings
- Health care buildings
- Bridges, dikes and roads
- Industrial buildings
- Sports and leisure
- Offices
- And much more!



2010: design of a floating Olympic Village



Could this be a reality in 2028?



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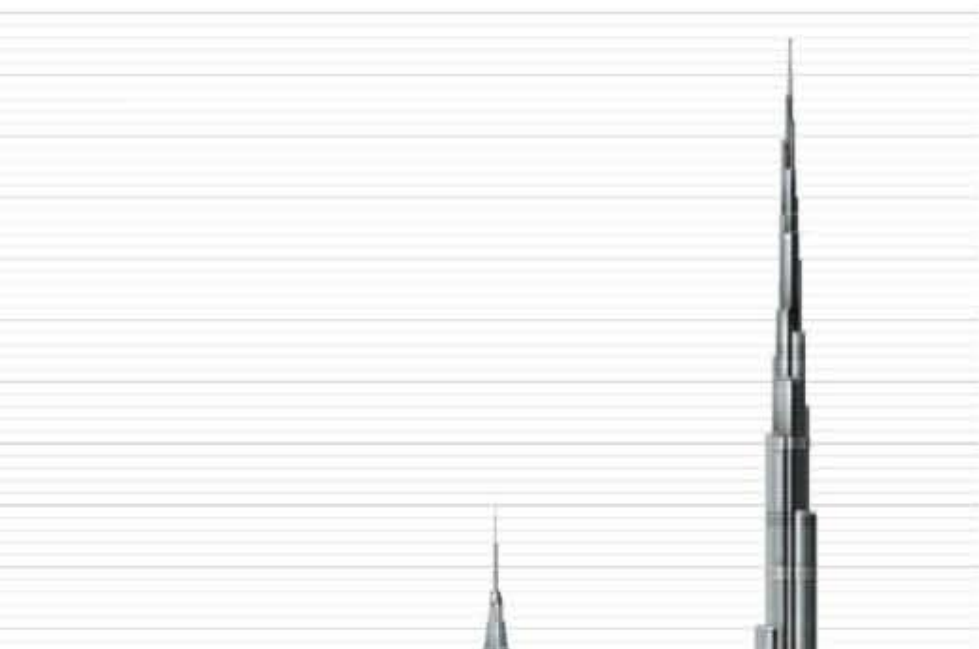
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Now about our math problem...



God created the world,
And the Dutch are creating a mountain....





Highest structure in the
world:
Burj Khalifa in Dubai
828 meters high





Consider building a 2 kilometer high
mountain somewhere in The Netherlands....

Why? How? Where?



August 2011: Ex-cyclist and sports journalist Thijs Zonneveld wrote a column on news website nu.nl about his mountain idea.

The idea grew and grew...



Benefits

- Sports
- Renewable energy
- Tourism
- ...
- ...



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FILM
HOFFERS KRÜGERS



Contributions of about 100 companies

- Banks
- Universities
- Engineers
- Architects
- Geologists
- Sport oriented companies



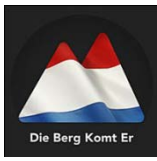
Feasibility studies

- Nearly impossible to construct a massive mountain out of rocks and sand
- 2 kilometers high with a diameter of at least 10 kilometers
- Mountain may be built in layers



Ideas

- Create a hollow mountain
- Energy storage room and generation of sustainable energy
- Fresh water lake inside
- Generation of energy by wind
- Solar panels on the surface



Problem description

1. Location, size, shape, weight distribution, climate
2. Energy storage



1. Location, size, shape, weight distribution, climate consider:

- Earthquakes
- Effects on soil levels
- Protection against the sea
- Wind and climate



2. Energy storage consider:

- Spread out peak power consumption
- Layers
- Initial investment



This could be the future...

