

Masdar:



“In Arabian Desert, a Sustainable City Rises”

By NICOLAI OUROUSSOFF

Excerpts from a New York Times, September 25, 2010 article

“...this past week, as people began moving into the first section of the project to be completed — a 3 ½-acre zone surrounding a sustainability-oriented research institute — it was clear that Masdar is something more daring and more noxious. ...*Its utopian purity, and its isolation from the life of the real city next door, are grounded in the belief ...that the only way to create a truly harmonious community, green or otherwise, is to cut it off from the world at large....*”

(Norman Foster) began with a meticulous study of old Arab settlements....often built on high ground, not only for defensive reasons but also to take advantage of the stronger winds.....Some also used tall, hollow “wind towers” to funnel air down to street level. And the narrowness of the streets — which were almost always at an angle to the sun’s east-west trajectory, to maximize shade — accelerated airflow through the city....by combining such approaches, they could make Masdar feel as much as 70 degrees cooler. In so doing, they could more than halve the amount of electricity needed to run the city. Of the power that is used, 90 percent is expected to be solar, and the rest generated by incinerating waste....

Not only did (Norman Foster) close Masdar entirely to combustion-engine vehicles, he buried their replacement — his network of electric cars — underneath the city. Then, to further reinforce the purity of his vision, he located almost all of the heavy-duty service functions — a 54-acre photovoltaic field and incineration and water treatment plants — outside the city....

What Masdar really represents, in fact, is the crystallization of another global phenomenon: the growing division of the world into refined, high-end enclaves and vast formless ghettos where issues like sustainability have little immediate relevance...

Ever since the notion that thoughtful planning could improve the lot of humankind died out, sometime in the 1970s, both the megarich and the educated middle classes have increasingly found solace by walling themselves off inside a variety of mini-utopias.....This has involved not only the proliferation of suburban gated communities, but also the transformation of city centers in places like Paris and New York into playgrounds for tourists and the rich. Masdar is the culmination of this trend: a self-sufficient society, lifted on a pedestal and outside the reach of most of the world’s citizens.”

Facts:

- (2007) UAE announces plan to build the “world’s first zero-carbon city”
- Location: 20 miles outside of Abu Dhabi, accessible by highway - light rail to connect city in future; gated community, isolated from world, and unaffordable to most
- Design Team led by UK-based Foster & Partners
- Community Design:
 - “High function, low-consumption,” (ex. Elevators are out of site to discourage use and promote stairs)
 - Researched old Arab settlements, including ancient citadel of Aleppo in Syria
- Buildings:
 1. Laboratories: R&D of sustainable energy technologies in partnership with MIT
 2. Residential Buildings: currently housing mostly professors, students, and their families
 3. Student housing is gender segregated – at opposite ends of campus
- Power Generation:
 - 90% solar – generated from 54 acre PV field outside city
 - 10% waste incineration plant outside city
 - Systems continually monitored to analyze performance for future adjustments
- Transportation:
 - No combustion-engine vehicles allowed to enter
 - Underground highway/tunnel network with fleet of driverless electric cars
 - Street-level: no vehicles, only foot traffic

SO, WHAT’S WRONG WITH THIS PICUTRE?

MASDAR	vs.	CPES ENTERPRISE COMMUNITY
Top Down	vs.	Bottom up
Technology Driven	vs.	People Driven
“Gated” community	vs.	Open Sustainable Enterprise community
High end “elite” jobs	vs.	Middle class and High end jobs
Controlled & Contained inorganic Design	vs.	An organic, evolutionary design
Massive front end project costs	vs.	Strategic investments to generate sustainable economic activity