Sustainable Urban Futures Travel-Study Program: Solution-based learning in Global Cities

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Abu Dhabi: Masdar City – a new model of sustainability?

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Masdar city is located near the Abu Dhabi International Airport, covering an area of 6 km² (2 sq. mi), costs US$ 18-22 billion and plans to be a sustainable mixed-use development.

The project is becoming a reality even if only 10% has been completed as of today. Masdar Institute of Technologies (hosting although the Siemens Company) and IRENA (International Renewable Energy Agency) are already built. The incubators building for start-up enterprises will be available here which is a good asset for investments. MIT (Masdar Institute of Technology) is a laboratory for the new experiments not only in the ecological but also in the building field for the Masdar city.

Masdar city can be considered like a critical infrastructure due to the production of knowledge. In 2006, Masdar city started to implement very ambitious goals such as solar panels, energy efficient buildings and reduced the demand for air conditioning by 55 percent. But today in 2016, they are correcting their objectives (e.g. “low carbon emissions” instead of “zero-carbon emissions”).

They are using more or less ecological building materials which have not a damaging impact on the health and environment, they have an ecological approach in the building projects (e.g. Inclined form of library building in order protect from the sun, narrow streets which allows us to have underground electric transport network, Arabic wind tower designed to bring cooling breezes down to ground level…). However, I didn’t notice a lot of green and blue elements (e.g. greenery roofs, green and blue facades, hanging gardens…).
Masdar institute is producing knowledge not only for Masdar city but also for Abu Dhabi city. For example, they are thinking how to promote walkability in the city, despite of hot temperatures (average temperature 38 degree and summer can extend from May to September) in the country where 80% residents are low income workers from different countries (mainly from India and Philippines). They are mainly walking to go to work because they cannot afford a car. There is a lot of global cities with much better conditions regarding the climate and the compact buildings that could improve walkability much more than Abu Dhabi. These cities could use the Abu Dhabi good practices in terms of motivation. Walkability is good for health, safe and security for the people and protects the environment.

The main idea of the project was “Future generations will be living in a world that is very different from that to which we are accustomed...”. But Masdar is more an innovated example for the actual challenges in terms of sustainable development than providing best practices for tomorrow.

The projects such as Masdar city, Hammarby sjöstad (http://en.wikipedia.org/wiki/Hammarby_Sj%C3%B6stad) in Stockholm are certainly promoting cities to invest into sustainable development. Every project has positive and negative sides and updates during the process of implementation.

https://urbanfuturesworkshop.wordpress.com/2016/02/23/day-3-critical-infrastructure-masdar-city/
I am convinced that, other cities will soon start to realise their “eco city” project. We will learn from our mistakes and share our good practices to reach higher goals in terms of sustainability. The most important thing is to start to move on and to have a transition from the theory to the practice. In this process we will understand at which point and level the theory is realisable.