



# Shiny, Slick and Sustainable Jennifer Taylor

Abu Dhabi's Masdar City is an experiment in sustainability built on oil money. But will it work?

**O**N THE OUTSKIRTS of oil-rich Abu Dhabi, construction of the world's first zero-carbon, zero-waste, car-free city is underway. Built by the state-owned Mubadala Development Company, and supported by the World Wildlife Fund, Masdar City will make use of traditional Persian Gulf architecture to create low-energy buildings powered by wind and solar energy, and will transport residents in travel pods running on magnetic tracks. It will host the world's largest hydrogen power plant and a state-of-the-art research institution affiliated with the Massachusetts Institute of Technology. By its completion in 2015, it will accommodate 50,000 researchers, students, and clean tech entrepreneurs and financiers. Voted the Sustainable City of the Year at the Global Renewable Energy and Finance Forum in 2007, Masdar City is lauded as a project that is "creating a manifesto for sustainable life."

But is a brand-new, highly contrived, \$24-billion (US) renewable energy showcase the ultimate vision for a sustainable future? Undeniably, Masdar City represents the pinnacle in efforts to bring clean-energy initiatives into the mainstream. Dubbed the future "Silicon Valley of renewables," Masdar City is slated to become the foremost global manufacturing hub for renewable power, helping to lessen the supply crunch of the most sought-after technologies. It will serve as an ambitious – albeit very expensive – blueprint for carbon-neutral urban planning. But will these endeavours really achieve the goals of sustainability? What are these goals after all? And who will ultimately benefit from the project?

The concept of sustainability arose in response to the negative trends

of biospheric degradation and the widening gap between rich and poor, and in recognition of the fact that they are inextricably linked. Over the last decade or so, the quest for sustainability in the energy sector has been primarily a technological pursuit aimed at reducing greenhouse gas emissions. Meanwhile, the social goal of fostering energy autonomy through local-ownership models, fundamental to the renewable energy movement of the 1960s and 1970s, seems to have been largely forgotten. Today, large-scale projects developed within the same structures of power – even by the same corporations that maintain fossil fuel and nuclear-power dominance over global energy supplies – define the renewable energy "revolution."

Masdar City is a perfect example of this contradiction. Not only is it situated in the United Arab Emirates, which has a huge vested interest in the continued exploitation of fossil fuels and one of the biggest per-capita carbon footprints in the world, but its major financial supporters include General Electric, BP, Royal Dutch Shell and Rolls-Royce. What's more, Mubadala Development Company is simultaneously undertaking the construction of the world's biggest aluminum smelter down the road, complete with its own gas-fired power plant. By its own admission, Abu Dhabi is predominantly concerned with securing its share of the energy market in the face of fossil fuel depletion. And nowhere in the abundance of promotional material is there any mention of how Masdar City will work toward that other elusive goal of sustainability: poverty reduction.

Yet, in spite of Masdar City's reliance on fossil fuel revenues and an elite, international populace, the concentration of so much renewable energy expertise

will yield technological innovations that may contribute to achieving sustainability – including its economic goals – far beyond Abu Dhabi's borders. Perhaps the project will even be *too* successful, and serve as an important catalyst for a bigger, faster and more fundamental power shift than the fossil fuel industry had anticipated. Haven't the stars very recently aligned in such a way – a global financial crisis coincident with the election of a renewable-friendly American president – that the social goals of a renewable energy future are sure to be increasingly extolled? And if more communities around the world adopt the co-operative model of renewable energy deployment widely practiced in Denmark and Germany, will it matter if global energy giants developed the technology? Who knows, maybe they *will* be the ones to pave the way to a more equitable and carbon-free future through projects like Masdar City – even if it may not have been their original intent. 

*Jennifer Taylor is pursuing a master's degree in Environmental Studies at York University. Her research is focused on the values, beliefs, and logic of support and opposition to large-scale renewable energy deployment.*

Masdar means "the source" in Arabic, conveying the hope of this city's entrepreneurs that the initiative will become a global hub for green-energy innovation: [www.masdar.ae](http://www.masdar.ae). The Masdar Institute of Science and Technology, in partnership with MIT, offers master's programs that focus on sustainable technologies and advanced energy science. Program details, plus video galleries showing construction of the "Green Community" campus, are available at [www.masdar.ac.ae](http://www.masdar.ac.ae).

© Foster + Partners / 2&3 Adrian Smith + Gordon Gill Architecture

Copyright of Alternatives Journal is the property of University of Waterloo and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.