

# Leaner but greener

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**The UAE real estate market might be struggling through a severe contraction, but building green is still high on the agenda for those looking to save the big bucks.**

As developers replace project launches with cost-cutting programmes, have environmental issues gone out the window? Industry players say no, claiming that going green is increasingly becoming a cost-saving measure.

According to some estimates, the UAE has the highest per capita ecological footprint in the world.

During a six-year property boom in Dubai, green issues remained on the back burner. By the time the emirate announced that it would introduce a green building code modelled on America's LEED certification system, the boom was already on the brink of turning to bust. (The LEED for New Construction Rating System is a US certification system that aims to distinguish high-performance buildings.)

Jim Krane, author of the book 'City of Gold', which traces the fascinating and sometimes overlooked history of Dubai, numbers among the critics.

"These buildings that they are [creating] - these kind of glass skinned skyscrapers especially, they just collect heat, so you need to pump all sorts of air conditioning into them just to cool them," he told Arabian Business in an interview.

As the market is flooded by supply and some developers struggle to survive, will building green fall off the UAE's environmental agenda completely?

By contrast, companies specialising in green technologies claim that the downturn has thrown up some interesting business opportunities for them.

Rowan Williams Davies and Irwin Inc (RWDI), a Canadian firm of consulting engineers and scientists, first began doing business in the UAE a few years ago.

Back then, it was mostly through its wind-engineering consultancy which, among other things, helps architects design super-tall buildings so that they won't fall over on a windy day. Much of the designs of the Burj Dubai, for example, were made through 1:500 scale models in the company's wind tunnels, to ensure the iconic tower's structure and its shape could efficiently manage its response to wind.

Regional manager Wayne Boulton says that while the entire business has felt the effects of the current global economic slowdown - the entire high rise market is "on hold", he says - green consultancy services have been more resilient than others.

"That has picked up, because people always want to save money, and in a downturn they want to save even more. So if we can take a traditional architectural feature and do an analysis that saves a company 10 to 15 percent on cooling bills, that is a significant cost saving. So that part of the business has grown substantially," he says.

Two years ago, RWDI landed a major contract in Masdar, the carbon-neutral city being built outside Abu Dhabi. The company has reviewed the Masdar City masterplan and formed detailed 'basis of design' guidelines for all future building designs. Elements considered were wind and thermal comfort; shading, daylighting and energy creation; air quality; noise and vibration; ventilation and dust impact. Essentially, RWDI is responsible

for ensuring that the carbon-neutral, zero-waste project meets its targets.

"The basis of design document essentially provides all the information that architects and designers need to know, in terms of how to orient buildings, how to stagger their heights, how to ensure they've got the right kind of windows on the right kind of surfaces, and how to leave enough gaps between buildings in order to give natural ventilation," Boulton says.

Masdar's work will have ripple effects on other projects in the country, he believes.

"This region is actually leading the pack in a lot of technologies. There are a lot of technologies being explored at Masdar that are first time ever. That's encouraging, because it sets a precedent in terms of the evolution," he says.

Ramboll, the global engineering, design and consultancy that has worked on the 25 sq km Ferrari World theme park on Yas Island, has also found that green projects have bucked the downward trend.

"With new accreditation becoming more in vogue with developers we're seeing a huge shift change in people's aspirations to develop green buildings," says Bill Ritchie, director of building services.

The company is working with architects and clients to deliver buildings that don't rely on mechanical electrical cooling services. Instead, they try to moderate the climate through good building design, which includes looking at the facade, orientation and shape of the building.

"There's a terrible perception that sustainable design costs money and that it adds something to the bottom line. It's not the case at all, and we can demonstrate that we save [developers] money in the short term as well as in the long term," he says.

(Arabian Business)