

BUILDING GREEN SHOULD NOT BE AN 'OPTION' BUT A COMPULSORY NORM

■ WITH THE UAE'S HIGH ENERGY CONSUMPTION DUE TO AIR CONDITIONING LEAVING A 'DEEPER' CARBON FOOTPRINT, DEVELOPERS MUST REALISE THEIR GREATER SOCIAL RESPONSIBILITY



Dr. Till Stoll

IT IS common knowledge that what we build strongly affects the environment and if proper attention is not given, it can be detrimental not just to the ecosystem but to communities as well. On a global average, the design, construction and operation of buildings annually consume more than 25 per cent of total energy, 55 per cent electricity, and more than 30 per cent of total raw materials used.

The UAE is one of the world's highest emitters of carbon monoxide and other greenhouse gases due to the enormous energy demand for air-conditioning and lighting. And our daily per capita water consumption in the UAE of an estimated 250 litres is far beyond the global average of approximately 10 litres.

Under such a scenario, one is prompted to question how green buildings will reduce this excessive consumption of resources. Appropriate green building practices have proven for decades to reduce the consumption of these resources and can substantially decrease or even eliminate negative environmental impacts.

In addition, green design measures play an essential role in cutting operating costs, enhancing building marketability, and raising worker productivity and well-being.

In Dubai, the LEED (Leadership in Energy and Environmental Design) Green Building Rating System was made mandatory for new buildings from January 1. LEED provides a framework for standardising buildings by utilising environmentally friendly design.

The system groups various building components into five sections - sustainable sites, water efficiency, energy and atmosphere, materials and resources, as well as indoor environmental quality. The rating system is based on credit points that a building can achieve, determining the level of LEED certification - Certified, Silver, Gold or Platinum.

At present, there is a widespread perception in the real estate industry that building green is significantly more expensive than



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the traditional methods of development, without the potential for attractive returns. Let's begin by clarifying LEED certification in terms of the financial aspects to build green.

What are the cost and benefits of building green?

The climatic characteristics in the UAE point to three key areas where green design should be implemented and the largest savings can be achieved: electricity, water consumption and insulation. Several studies looking at only these three aspects of a building, indicate that the premium for integrating green building practices in a newly constructed property is less than 2 per cent.

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levels to about 2 per cent, and for Platinum it stands at 6.5 per cent. Included in these figures are the project registration and review fee payable to the US Green Building Council ranging from approximately Dh55,000-Dh80,000, depending on building size and the type of LEED certification.

Based on appropriate design measures, a Dh200 million tower project in Dubai would therefore add a mere Dh4 million green design premium. It is important to note, however, that insulation suitable to the climatic conditions in the UAE could increase these cost figures since the consequent application of this building element is nearly always neglected in Dubai's real estate developments.

Compared to the operational cost savings resulting from the energy and water efficiency measures of approximately 20-25

per cent in a building on the Bronze level, the cost premium is usually offset soon after starting operations.

Investors prefer green buildings

While this cost-savings equation makes sense for most end-users of their own property, the case does not appear as clear with developers who sell the building after completion. It is obviously not in the commercial interest of developers and contractors to reduce their margins with increased design, material and construction cost if they do not benefit from subsequent operational savings.

Investors, on the other hand, show keen

preference for green property. Not only is this type of real estate cheaper to operate, but often the quality of both the structure and finishing is much higher than in conventional buildings, due to better planning and execution.

The marketability of a green property can thus be much higher than of conventional real estate, also due to the growing audience showing a high awareness for and interest in protecting the environment. This has certainly proven to be a key selling point for investors.

The writer is CEO of Green Destinations llc and Professor at the Dubai Real Estate Institute

STUDY COURSE ON ECO-FRIENDLY PROPERTIES

■ As the first academic institute dedicated to real estate studies in the region, the Dubai Real Estate Institute (DREI) is offering an executive programme on 'Real Estate Ecology and Green Property Development' from June 8-10. It explores the ecological and economic aspects of green property on the three relevant levels - the inhabitant, building and community - as well as the interactions between these levels.

The programme gives participants the essential skills to design detailed concepts and investment models for green buildings and sustainable property, while planning and implementing these concepts in order to positively influence the environment.

For further information, contact DREI by email on admission@drei.ae or call +9714 426 7777, or fax +9714 426 7776.