

Africa shows rising interest in green building design

By <u>Alison Groves</u> 13 Jul 2017

The UNEP Sustainable Buildings and Climate Initiative attributed 30% of annual carbon emissions to the global building sector. In response to this and the commitments made by numerous states to reduce their carbon emissions in line with the Paris accord, green building design has become integral in the design and construction of buildings in many parts of the world, as well as in Africa.



Alison Groves, regional director and sustainability consultant,

Over the last six years – in particular - there has been significant uptake of green buildings. In fact, building green or building for sustainability and climate change mitigation is increasingly becoming an industry standard in the South African market – where the industry is doubling every year, and as the Green Building Council of South Africa (GBCSA) introduces more rating tools, the uptake for green buildings will continue to grow exponentially. Added to this, similar market interest in and movement towards green buildings can be seen throughout Africa in the past four years where the GBCSA continues to assist in establishing Green Building Councils north of South Africa's borders. Through these efforts, to date, GBCs have been established in Namibia, Zambia, Mauritius, Rwanda, Tanzania, Kenya and Ghana. Additionally, six buildings have been accredited under the Green Star ratings credentials, including three in Namibia, one in Rwanda, one in Kenya and one in Ghana.

Proven economic business case

This progressive uptake of green building principles is not surprising as the industry's shift to embrace sustainable practices has a proven and significant economic business case. The shift is also largely being driven by continuous and growing pressure being placed on the 'built' space to address inadequate energy resources, carbon reduction targets and revised building energy efficiency standards.

Architects and consulting engineers are therefore constantly coming up with alternative and cost-efficient building designs to offset the impact of the building on its immediate environment. The green design elements may be vast, and vary between buildings, but will most certainly at the very least include things like; the materials used in the building construction,

energy efficiency – use of natural light and floor air flow that might lesson the use of artificial lighting and air-conditioning, for instance – as well as water consumption and waste to landfill considerations.

While previously it was thought to be more costly to make the upfront capital investments to go green, volatility in both the cost and availability of power and water is influencing a mindset change in that sawier consumers are realising the benefits of being more "green" and, for example, offsetting as much of their energy consumption as possible. Added to this, in the long-term, not only are these green building design adoptions financially beneficial due to reduced energy consumption, but the use of renewable and more sustainable energy resources also has the propensity to reduce the carbon emissions emitted by these buildings and provide increased resilience to uncertain service delivery.

Social agenda maturing in Africa

In Africa, the social agenda is maturing at a rapid pace and cookie-cutter solutions of the past have now made way for more mature and indepth engagement.

As market awareness grows on building for sustainability, so too does exposure for the skills that exist within the continent that can develop and drive unique or customisable green building design solutions for different markets and climates on the continent. From a sustainability point of view, this is a crucial aspect of every design endeavour - from technology specification to materials selection and labour practices. Opportunities to make a difference, fostering and supporting a green economy, exist within every project or business initiative. As such, it is conceivable that in 10 to 15 years from now, the rest of the world may be looking to Africa for original solutions, experiences and expertise in the careful balancing act of optimising equally social equity, economic prosperity and environmental stewardship.

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