

Reduce carbon emissions with green construction

The South African built industry is increasingly recognising that green construction is imperative if we are to reduce carbon emissions and leave a world that will be habitable for future generations. The move to green is therefore rapidly gaining momentum here, in line with the global focus on ensuring a green, sustainable environment, and the international commitment to reducing energy consumption.



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"The worldwide focus on sustainability, rising electricity prices and triple bottom line reporting are forcing companies to become increasingly aware of their carbon footprint," states Jaco Cronje, a director at EES, an ISO 9001:2008 professional engineering and management company, and a leader in project managing the provision of information technology (IT) solutions to the built environment.

Integration of IT

Essential to the construction of a green building is integration of IT and multiple system intelligent infrastructure, and in overseeing this integration EES proactively assists its clients to reduce their carbon footprint and wherever possible curtail any practices which negatively impact on the environment.

"A strong information and communication technology (ICT) platform is essential to ensure the delicate balance between being environmentally responsible and growing a company's African and global presence," continues Cronje.

Bradley Hemphill, managing director of EES, stresses that integral to being environmentally responsible is energy efficiency. "Intelligent infrastructure integrates energy efficient lighting and heating, ventilation and air-conditioning (HVAC) temperature control systems. Through further integration of CCTV security and access control, fire control and digital signage it contributes to the efficiency of the overall building.

Data centres

"A growth area within the technology realm is the data centre. Here the intelligent network within the building connects and forms the nerve centre of the network. Data centres are growing in size and power thus increasingly becoming more power hungry through air conditioning and servers. EES pays particular focus in data centre design on the power utilisation efficiency of data centres - reducing the ratio of total power consumption to IT equipment consumption."

These efficient resources and systems of course contribute to the well-being of owner/occupiers and tenants of the building. "While there are initial costs involved in the construction of green buildings, which may be prohibitive to some companies, the long-term cost benefits far exceed the initial costs, and ultimately lower operating costs going forward. With the advancements in technology, we are seeing pay-back periods reducing on a continuous basis," Hemphill continues.

He adds that the most efficient and cost-effective method of green construction is to incorporate green methodologies and energy efficiency principles right from the design phase, as opposed to retrofitting. Hemphill concludes: "We at EES are proud to be able to contribute to the environmental sustainability initiatives of our clients, to help the built industry reduce its carbon footprint, and to play a role in shaping South Africa's green future."

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