The benefits of "Green" building

Climate change is no longer a speculation but a reality in our lives. "The construction and operation of modern buildings, those in which we will live and work, are responsible for the consumption of many of our natural resources, and the generation of carbon and other gases that cause global warming," says Larry Feinberg, Executive Director at the Association of South African Quantity Surveyors (ASAQS).

In the Unites States, to which South Africa's major cities can draw a parallel, buildings account for 39% of total energy use, 68% of total electricity consumption, 30% of landfill waste, 38% of carbon dioxide emissions and 12% of total water consumption.

As populations grow bigger and urbanization grows cities at an unprecedented rate, with local authorities building upwards and not outwards, this concentration of people and the conveniences of life impact our natural environment – aggravating climate change even further.

Environmental benefits

Going "Green" has a number of environmental benefits. But what does going Green mean? "In a nutshell, it means that we, as humanity, pursue the knowledge and practices that will lead to more environmentally friendly and ecologically responsible decisions and lifestyles, which will help protect the environment and sustain our natural resources for current and future generations," Feinberg explains. "Among the benefits are enhancing and protecting biodiversity and ecosystems; improving air and water quality; reducing waste streams; conserving and restoring natural resources."

Economic benefits

But, it's not just environmental benefits that are created by going Green. There are a number of economic benefits to add to the equation. With a little savvy one can achieve a reduction in building operating costs, e.g. wastewater reuse in air conditioning systems and solar power, or energy from waste, an improvement in occupational productivity, the enhancement of asset values, and in profits due to lower operating costs, and the optimisation of economic life-cycle performance.

Social benefits

And, it doesn't stop there. The social benefits of going Green include the improvement of domestic, occupational and leisure health and comfort through greatly improved indoor and outdoor air quality, lighting and temperature control, improved landscape aesthetics in minimising local utility infrastructure and a general improvement in our overall quality of life - because our natural environment will be less impacted.

How Quantity Surveyors can assist the Green revolution

"By using a professionally qualified and experienced QS a building owner will be given an accurate projection of the costs involved in a Green building construction project, or the conversion of a traditional building to a Green building," Feinberg says. "You will also have a highly effective cost strategist in the team to help lower costs through ideas, substitutions and experienced advice."

This will certainly lead to increased certainty that the building phase will be finished on time and within budget; ensuring that value for money is attained by the client and a value added to the project through a unique blend of construction knowledge, advice on strategic and cost planning and the procurement of construction products and services.

We know that Green buildings, or what we alternatively refer to as sustainable design, is a best practice in increasing the efficiency of a building and its use of energy, water and materials, as well as to reduce building impact on human health and the environment over the entire life cycle of the building. This is known as 'value engineering'. "Quantity surveyors are the people to help in making this become a reality – saving you time and money in the process," Feinberg concludes.