



In conversation with Ms Dorah Modise CEO of the GBCSA



Please tell us about yourself in relation to your journey in sustainability culminating to where you are now at the Council.

I hold an MBA from the University of Pretoria's Gordon Institute for Business Science (GIBS), A Master's Degree in Environment and Development from the University of Sussex, UK; a Post-Graduate Diploma in Environmental Diplomacy from the University of Geneva, Switzerland and a first Degree in Environmental Health from the Tshwane University of Technology.

Prior to taking over the role of CEO of the GBCSA, I was Strategic Executive Director: City Sustainability at the City of Tshwane where I was responsible for leading the sustainability programmes and ensuring that the City becomes the greenest most sustainable city in the African Region. Until December 2012, I was a Chief Policy Advisor for Sustainable Development at the South African Government Department of

Environmental Affairs where I spearheaded the development and implementation of the National Strategy for Sustainable Development, South Africa's engagements in global sustainable development negotiations, the environment sector green economy response including the establishment and management of the national green fund. I also led the national environmental outlook reporting processes and the generation of environmental statistics.

I have more than 20 years work experience spanning from community development and environmental health to academia where I lectured environmental pollution control (waste, water and air) at the then Technikon Witwatersrand (later merged with RAU University to become University of Johannesburg).

While increased urbanisation is inevitable, how do you think cities can still grow in "climate positive" ways?

We choose to view urbanisation in a positive light. It gives us an opportunity to implement bold, cutting edge design methods that will ensure minimum environmental impact.

Cities can adopt Net zero and net positive policies, not just for buildings but their infrastructure programmes.

Buildings are one of the main contributors to climate change. What are your thoughts on the emerging narrative of a need to broaden the conversation beyond just green buildings and expanding it to green cities, the idea that cities should be the focus, in order for the impact to be greater than singular buildings?

Cities are without doubt the pulse of any nation, and the rate of urbanisation will continue to increase well into the future. How then do we make cities sustainable and resilient? My previous experience as the head of the City Sustainability Unit at the City of Tshwane (CoT) has given me unique insight into the project of making cities more sustainable.

I have learned that competing mandates for SA Municipalities make it difficult for city administrators to directly prioritise sustainability initiatives. However, that is a wrong way of looking at it. You see, sustainability needs to be integrated into the fabric of decision-making. Aligned to that, is the issue of goal-setting to drive the sustainability of





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cities. Here are what I regard as crucial goals:

- Develop spatial plans that are people focused and take the aspect of liveability and mixed use into consideration;
- Work with National Treasury to review revenue and incentives structure of municipalities in order to de-couple city revenue from coal-based electricity income as this remains a tricky factor in enabling the adoption of renewable energy solutions at local government level;
- Get back to basics. Actively engage citizens. And this should not be by the way of a rigid consultation session where a political head

would address a group of community members in a town hall, but rather a real activation process where small projects are done at different localities by residents. Such projects create a sense of “joint implementation” and generates an appetite to do more;

- Get the by-laws and policy frameworks with clear monitoring and verification systems in place. This will ensure focused interventions while providing certainty to private sector; and
- Integrate efficiency savings in all municipal infrastructure programmes, especially electricity supply, water supply, housing development and roads & transport.

What are the benefits of green building and sustainability of the built environment in general?

Green Building is a building which is energy efficient, resource efficient and environmentally responsible – it incorporates design, construction and operational practices that significantly reduce or eliminate the negative impact of development on the environment and occupants.

The environmental benefits of green building are beyond dispute. With the construction and on-going operation of building consuming 40% of total energy usage worldwide and generating one third of all carbon emissions, green building is a major part of the solution to addressing climate change and resource scarcity.

It has become common practice for new buildings to be built and certified as green, making them more attractive to the market, not only with lower operational costs but also offering many other short and long term benefits for the environment, building occupants and the building owner.

Energy & Water: Green Star SA rated buildings cite energy savings of between 25% and 50% compared to a building designed to regular SANS 204 standards. The payback periods of energy and water saving initiatives are becoming markedly shorter as a result of increasing utility costs and the wider availability of more affordable green building technology. Waste will soon become a great opportunity for cost savings in green buildings with an imminent increase in waste removal as landfill sites start to run out of airspace.

Higher returns on assets: Extensive studies in the US and Australia have shown rental rates in green buildings to be approximately 6% and 5% higher, respectively.

Increased property values: Green buildings result in increased property values as a result of decreased operating costs, higher lease premiums and more competitive, less risky, future-proofed buildings. This has been empirically proven in the US and Australia with 11% and 12% valuation premiums, respectively. Mainly due to increased desirability, tenants want to be in green buildings, especially corporates who have sustainability targets to meet. We are beginning to see this trend in the South African property market.

Reduced liability and risk: Green buildings are future-proofed against increases in utility costs, potential energy and water supply problems, tightening legislation, carbon taxes, and the impact of mandatory energy efficiency disclosure, as well as costly retrofits to ensure they are not at a competitive disadvantage in future, or even obsolescence.

Ability to attract and retain government and other major tenants: The South African Department of Public Works’ planned ‘Green Building Framework’ Policy is likely to include certain green building requirements for government accommodation. This will increasingly apply to large multi-national tenants too. In a number of countries, government and leading companies have committed to only build or occupy green certified premises in order to show commitment and leadership. Green leasing is also becoming a key focus for many corporates and governments who require specific green building elements as part of the lease.

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Responsible investing: Investment in green building forms an integral part of the worldwide trend to more responsible, sustainable and ethical investing. The Triple Bottom Line concept developed by John Elkington looks at the economic, social and environmental impact of an organisation. The Triple Bottom Line and its core value of sustainability have become compelling in the business world due to accumulating anecdotal evidence of greater long-term profitability.

Increased productivity: Improved internal environment quality (IEQ) from increased ventilation, temperature and lighting control, as well as day-lighting and the absence of toxic materials, result in improved health, comfort and wellbeing of building occupants. This has been shown to lead to increased productivity – an important area of focus due to its significant

potential impact on the profitability of a business. Studies show resulting improvements in productivity of up to 20% – easily covering the premium, which may be paid for by the higher quality green space.

Competitive edge in attracting and retaining talent: Employees and younger graduates who are increasingly aware of environmental and health issues, are making this part of their decision making process in applying for work or staying with the same socially and environmentally responsible companies.

Minimising the costs and impacts of churn: Employees and tenants often remain with a company as a result of increased comfort and occupant satisfaction, and more flexible spaces. With lease terms in South Africa typically ranging between three and five years, churn (tenant changeover) can lead to significant costs.

Can you quantify the impact that green building has made on the effective management of climate change?

Buildings are one of the main contributors to climate change and significantly impact on a broad range of other environmental, social and economic issues through their design, construction and operation. Building green is an opportunity to use resources more efficiently, to address environmental issues including climate change, while creating healthier and more productive environments for people and communities.

Key elements of a building’s carbon footprint include: Materials (mainly the embedded energy of materials); Energy –source and usage; Water use; connectivity (proximity to and facilities that enable mass transportation and non-motorised transportation); percentage of indigenous vegetation that can serve as carbon sinks.

Concerns in the industry have centered on the belief that there is lack of accurate quantifiable information regarding the financial cost and economic impacts of high-performance buildings. How does the Council challenge the belief that green buildings cost much more than conventional buildings? Highlight some quantifiable costs vs benefits of green building

Our inaugural Green Building in South Africa: Guide to Costs and Trends Report, compiled in conjunction with the Association of SA Quantity Surveyors (ASAQS) and the University Of Pretoria (UP), which found that the average cost premium of building green over and above the cost of conventional construction is just 5.0% and can be as low as 1.1%. We must remember that this was based on projects to the end of 2014 and that there was probably an element of “early adopter”

premium included in these early projects. As the experience curve starts taking effect, costs will inevitably come down. These findings, together with the joint MSCI/GBCSA Sustainability Index which continues to show that in South Africa green buildings yield a higher return on investment, make a very strong business case for green buildings to developers, property owners and corporates.





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What should cities be thinking about in general, and what should African Cities in particular be thinking about regarding sustainable practices and green building? From your perspective, what is the role and purpose of the local government sector, in particular the necessary governance configurations to bring about the change?

Local Government is a driver of development and growth. This sector needs to lead by example through developing and implementing policies that are geared for future sustainability. Cities need to collapse silos created through rigid organisational structures that fail to recognise the need for holistic spatial development.

Africa remains the “youngest” continent in terms of average age of population and is fast urbanising. This level of energy calls for robust and innovative urban solutions.

What leadership capability / capacity and mindset do you think is required in the industry in order to ensure that Cities promote buildings that are designed, built and operated in an environmentally sustainable way?

Bold leadership is required to take us to the next level of sustainability. Being “safe” is no longer an option. Decisive action has seen many cities

across the globe transform in short periods of time, there are examples of best practices, lets learn from them and take the next step.

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