

Sustainable construction is the trend to watch



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Rachel Carson's *Silent Spring* (1962) became a cornerstone for understanding environmental sustainability; the construction industry is now at the same crossroad. How can something so important for resolving SA's socioeconomic challenges present such a threat to the environment. The dynamic shift towards sustainable construction will be one of the defining business trends of 2022. This is a trend that is accelerated by a greater awareness about the impact of the sector on the global environment and by greater access to new technology and research.



Bongani Dladla, acting chief executive officer of the CIDB

It has also taken root in South Africa and is no longer only within the ambit of the larger players in the built environment. Emerging enterprises and up-andcoming contractors also recognise the need to shift towards sustainable practices should they want to increase their share of business in the sector.

The Construction Industry Development Board (CIDB) with our mandate to transform the industry, facilitate access to public sector construction opportunities and champion the participation of emerging contractors, is uniquely placed to be a catalyst in this process.

Our B.U.I.L.D programme, launched in 2021, provides a framework within which we can advance the concepts of sustainable construction. In it we define the initial 14 standards for the transformation of the sector, but also commit the CIDB to the power of public-sector purchasing to promote best practices and achieve socioeconomic and developmental objectives.

There is no doubt that the built environment has profound impacts on people, the planet and future prosperity. It consumes valuable natural resources and shapes the way in which people live, work and interact with their surrounding environment.

By its very nature, it leaves a long-term impression. Choices made today on the design of buildings and the materials used for construction will remain features of the environment for decades to come.



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Concerns about environmental footprint

There is, therefore, justifiable global concerns about the sector's impact on the environment. At a recent CIDB webinar on the State of the South African Construction Industry, both local and international participants again quoted the alarming statistics about the sector's legacy footprint.

Globally, the built environment generates 30% of total greenhouse gas emissions. It consumes approximately 32% of the world's natural resources. It contributes to the more than 500,000 annual deaths globally that can be attributed to poor air quality.

In Africa, the statistics are brought home in the lived experiences of communities. Huge swathes of forests are being denuded to harvest construction material. Rivers are clogged by the pollution caused by such activities. Already marginalised communities are further deprived of their natural habitats and traditional ways of living.

But this tide is turning. Many global and regional forums are tightening targets for pollution and have defined new standards to which the construction industry should adhere to.

Sustainable construction practices offer solutions to mitigate these impacts. Contractors are increasingly making smart choices on building design, energy efficient features, a reduction in the utilisation of water and higher levels of recycling of waste generated by construction activities.



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Democratising access to information

The caveats expressed in the past were that these solutions are only found in the toolboxes of the large and well-established construction conglomerates. Emerging enterprises and contractors owned by black South Africans, women and the youth cannot function in this space, and the gap between the "big and the small" continues to widen, it is argued.

This is no longer exclusively the case. The onset of the fourth industrial revolution is democratising access to information and enabling emerging enterprises to adapt their practices and strengthen their foothold in the construction value chain.

Already we are seeing emerging enterprises identifying niches in the market. For example, I will again cite the example of two female entrepreneurs from Sasolburg, Kekeletso and Kedibone Tsiloane, who have brought to market an innovative product which uses recycled plastic to manufacture bricks which are strong, durable and environmentally friendly.

Through their company they extend the value chain by purchasing plastic from waste pickers and buy-back centres and recycle volumes of plastic which would have ended up in landfills or the environment.

Again, the CIDB will be a catalyst in this process. Earlier this year we published a comprehensive summary of recent research about emerging trends in sustainable construction which can be accessed by participants at all levels of the industry.



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Towards social and economic sustainability

It should be remembered that sustainable construction goes beyond the obvious elements of energy efficiency, waste reduction and protection of the physical environment. It also has to address fundamental issues in the socioeconomic spheres.

This is especially true in the South African context where decades of apartheid spatial planning have pushed poorer communities to the fringes of the urban metropoles. And where inferior construction techniques and unsafe building practices have contributed to the marginalisation of the majority of our citizens.

These realities can no longer be ignored as we make the shift towards sustainable construction. Solutions must be reflected throughout the lifecycle of projects - from the pre-design stage to the actual construction, to the long-term maintenance plans.

Communities must, to a much greater extent, be involved in the planning of human settlements. And project planners and contractors must incorporate vital elements of social transformation relating to access to amenities, public services and transport opportunities.

Emerging construction entrepreneurs can play vital roles in such transformation processes. Their own lived experiences provide them with unique insights in the needs of communities and the innovations that can be introduced to achieve these goals.

As the key public sector entity with the task to broaden the contribution of the construction industry to the South African economy and society, the CIDB intends to extend its catalytic role in this process.

ABOUT BONGANI DLADLA

Bongani Dladla is the CEO of the Construction Industry Development Board.

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