

Peter Middleton

COMMENT



Sustainability and South Africa's competitiveness

At the time of writing, the UN's COP30 climate summit is underway in Belém, Brazil, in the heart of the Amazon rainforest. The focus is said to be 'turning words into action', with an urgent push for climate adaptation: through updated Nationally Determined Contributions (NDCs), the climate action commitments made by individual countries under the Paris Agreement; finding a way to 'unlock' \$1.3-trillion of climate finance to steer the planet clear of a 1.5°C rise in average global temperature; and a renewed focus on ending rainforest loss.

I find it difficult to feel optimistic about the outcomes. In the words of the COP30 summit president, André Aranha Corrêa do Lago, Brazil is "at the epicentre of the climate crisis." At COP26 four years ago, over 140 countries pledged to halt and reverse deforestation by 2030, but global forest loss reached record highs in 2024. In the same year, the average global temperature was recorded at 15.10°C, exceeding the pre-industrial average temperature level (13.68°C) by 1.6°C, thereby breaching the 1.5°C target for the first time. That surely indicates that the 2050 target is likely to be impossible to meet.

Brazilian summit president Corrêa do Lago is calling for an end to the "hedging and handwringing" that has characterised the past few summits. The US's withdrawal from the Paris Agreement, however, is likely to make meeting the \$1.3-trillion climate finance goal difficult to reach, and it raises a further risk of a domino effect across the globe, where countries increasingly renege on their climate commitments or delay their NDC submissions.

Either way, COP30 will be a pivotal moment for the climate summit: an opportunity to set in motion the kind of climate action and justice the world needs to see, or another complete failure of international diplomacy that leaves the planet facing increasing levels of peril and questioning the political will of this generation of leaders to do anything about it.

From an industry and technology perspective, however, there are many more positive signs of progress and compelling reasons for transitioning to a low-carbon economy.

In the cover story for this issue, we talk to the director of the CSIR's National Cleaner Production Centre-South Africa (NCPC-SA), Ndivhuho Raphulu. With respect to the EU's Carbon Border Adjustment Mechanism (CBAM), which puts a carbon price on goods imported into the EU to prevent 'carbon leakage', Raphulu says the policy is encouraging South African industry to adopt production methods that

mitigate carbon emissions and implement climate adaptation technologies. "This also supports localisation, research and development, innovation, skills development and capacity building in our country."

Regarding the adoption of PV Solar technology in South Africa, he notes that government incentives, such as the VAT write-off process, have resulted in many households installing solar PV on their roofs, creating a new economic activity for rooftop solar PV installers in South Africa, while also reducing our dependence on coal. As a result, PV Solar is now much more affordable than it was.

In an article by Amith Singh, National Manager for Manufacturing at Nedbank Commercial Banking, he argues that the competitiveness of the manufacturing sector in South Africa now depends not only on cost, quality and delivery, but also on a fourth metric: carbon. Embedded emissions in every product exported to Europe now carry a tangible financial cost. Yet despite the price signals, many firms still lack the systems to measure carbon reduction progress.

Highlighting the Nedbank-NAACAM Carbon Readiness Study, he notes that a leading Tier 1 automotive supplier has recently become the first in South Africa to trial low-carbon steel in production, thereby reducing embedded emissions to align with international buyer expectations and strengthen its export market position. Their example shows that carbon readiness is not a compliance burden but a competitive advantage.

Also responding to the Carbon Readiness Study, Renai Moothilal, CEO of NAACAM, says that the pressure to decarbonise is coming less from government regulation and more from supply chain expectations. "Buyers are expecting suppliers to measure and report their emissions and to demonstrate progress on reducing their environmental impact, while lenders and institutional investors are channelling funds towards companies with robust sustainability plans," he says.

In this context, carbon performance is no longer a niche compliance concern but is fast becoming a critical factor in maintaining and growing market share.

These and many other signs suggest that transitioning to a cleaner and less carbon-intensive economy may no longer depend on the success of the endless round of fragile commitments made at the UN's annual COP summits. The modern technologies involved have a positive impact on lifestyles, the global economy, and the future of the planet, and they are becoming increasingly preferable and affordable.



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