



Climate

Conclusion: Challenges of achieving a Low-Carbon Future

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Africa will suffer more than any other region from climate change impacts despite having contributed little to the cause of this problem. Decisive leadership and an effective executive system capable of averting a global crisis is sorely needed. Today, geopolitics and domestic politics intertwine, leading to an uncertain future with devastating outcomes and consequences for many, particularly in Africa. Sustainable solutions and adaptation are becoming increasingly urgent. We examine many of these challenges in our forecast of [global futures](#).

Our findings highlight the complex nature of Africa's transition away from fossil fuels, presented in the separate theme on [Energy](#). Contrary to the rapid shifts proposed by UNEP and others, our analysis suggests a more gradual phasing out, starting with coal, then reducing oil and eventually gas beyond 2050. That transition is moving fast in many advanced economies such as Europe, North America, Japan and in China, but is much slower in developing countries, particularly in Africa which requires substantial support from wealthier nations to establish a feasible transition to renewables and a carbon emission pathways. For Africa climate finance is the critical enabler of the global energy transition which needs to be at the top of the COP agenda in Baku (COP29 in 2024) and Brazil (COP30 in 2025).

To date [little has come](#) of previous initiatives such as the 2021 Glasgow Financial Alliance for Net Zero (GFANZ) that was to bring US\$130 trillion to bear on the climate crisis or the Just Energy Transition Partnerships (JET-Ps) also promoted at COP26. The flagship JET-Ps in South Africa and Indonesia have barely raised one-tenth of what is required and those in Indonesia, Vietnam and Senegal have not fared better. COP27 subsequently introduced a loss and damage fund that aims to provide financial assistance to nations most vulnerable and impacted by the effects of climate change but it is still unfunded. Rather than the promises from the developed countries who promoted both, it is China that is powering ahead in spending on renewables. The crisp question is: Who will finance the significant investments required for gas and oil as the world gradually moves away from fossil fuels? The world needs early and decisive action to prevent the catastrophic consequences of continued fossil fuel dependency in Africa if it is to avoid climate catastrophe and this theme examined the implementation of a global carbon tax that is the essential response component.

Adaptation efforts must catch up to mitigation efforts globally and in Africa. Efforts to adapt to climate change must prioritise the protection of communities, ecosystems, and economies from its adverse effects. Our report underscores the importance of enhancing resilience through various means—be it poverty alleviation, conflict prevention, or healthcare improvements—alongside modifying infrastructure (land use planning, climate-smart practices, climate-resilient infrastructure), being more efficient with natural resources (e.g. water and land use management) and formulating policies that enable societies to respond effectively to evolving climatic conditions (aid support, investments, early-warning systems etc.) to withstand climate challenges better. This becomes particularly complex when accounting for concurrent crises like poverty, undernutrition, and civil conflict. Africa's best response to the emerging threat of climate change is to pursue a sustainable development pathway, as reflected in the Sustainable Africa scenario.

Adopting diverse carbon reduction strategies globally, including carbon taxes and cap-and-trade systems, reflects a commitment to [environmental stewardship](#). However, geopolitical tensions, notably between China, the US, and the EU, pose significant challenges to these efforts. On the one hand, the competition for green energy leadership could create a 'race to the top', spurring green investment, innovation and international climate action. On the other hand, the rising tensions undermine cooperation and fragment the green energy market. Tense geopolitics threaten to undermine collaboration across ideological divides. With China dominating almost all clean technology supply chains, policymakers must square the imperative to reduce dependencies with adequate cooperation to meet decarbonisation goals.

Carbon pricing mechanisms like the EU's Emissions Trading System offer a flexible approach to reducing greenhouse gas emissions. In addition, carbon offset programs enable entities to counterbalance their carbon footprint by investing in

projects that mitigate emissions but remain controversial. Industries worldwide, particularly the aviation sector, have prominently embraced this approach through reforestation, renewable energy projects, and energy efficiency initiatives but the system is prone to greenwashing and shifting of responsibilities.

The effectiveness of these systems is also marred by concerns over their impact on vulnerable populations and the risk of **carbon leakages**, which could inadvertently shift emissions to less regulated regions.

This highlights the opportunity for mechanisms like Carbon Border Adjustments (CBAs) to level the playing field for imports and domestic products, as exemplified by the EU's Carbon Border Adjustment Mechanism (**CBAM**), aiming to align industries within and outside the EU and impact specific carbon-intensive goods from 2026 onward. Despite its potential, concerns arise regarding potential **harm** to African economies. Industries in low- and middle-income countries need more resources to decarbonise production. Without careful consideration, CBAM will increase global inequalities and proactive measures are required to ensure that carbon strategies are practical and globally equitable. **UNCTAD** notes that African countries need expanded access to foreign currencies through central bank swaps and enhanced resilience during external crises through standstill rules on debtors' obligations, such as climate-resilient debt clauses. This, the Conference notes, would allow a halt in debt repayments, providing some breathing space for crisis management.

Moreover, integrating adaptation measures across sectors, including healthcare, agricultural practices, transportation, infrastructure resilience, social services, urban planning, etc, is imperative. Strengthening Africa's healthcare infrastructure, establishing robust disease surveillance systems, facilitating widespread access to vaccines, incorporating climate-resilient city design, and fostering international collaboration are indispensable steps in building adaptive resilience across the region.

In summary, our analysis emphasises the urgency of addressing both the causes and effects of climate change in Africa and the need for a concerted global effort to support the continent's transition to a low-carbon future. This entails a multifaceted approach involving mitigation strategies, adaptation efforts, and financial investments tailored to the continent's unique context. Africa needs international cooperation that is sensitive to the intricacies of its manifold challenges if it is to get to a sustainable and equitable future for its vulnerable communities and ecosystems.

Recommendations:

- **Enhance Climate Leadership:** Decisive leadership to tackle the climate crisis.
- **Support a gradual Energy Transition:** Implement a gradual phasing out of fossil fuels in Africa.
- **Increase Climate Finance:** Prioritize climate finance at global forums to enable Africa's clean transition
- **Fund Adaptation Initiatives:** Ensure that adaptation efforts are fully funded.
- **Implement Global Carbon Tax:** Advocate for the implementation of a differentiated global carbon tax.
- **Promote Sustainable Development:** Pursue a sustainable development pathway in Africa to enhance resilience against climate change impacts.
- **Adopt Carbon Reduction Strategies:** Embrace diverse carbon reduction strategies to reflect a commitment to environmental stewardship.
- **Ensure Equitable Carbon Pricing:** Address concerns about carbon pricing mechanisms to prevent global inequalities and support decarbonization.
- **Integrate Adaptation Across Sectors:** Incorporate adaptation measures across sectors such as healthcare, agriculture and urban planning sectors.
- **Utilize Natural Carbon Sequestration:** Leverage Africa's natural carbon sequestration potential to capture and store carbon efficiently.

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Dr Jakkie Cilliers is the ISS's founder and former executive director. He currently serves as chair of the ISS Board of Trustees and head of the African Futures and Innovation (AFI) programme at the Pretoria office of the Institute. His 2017 best-seller *Fate of the Nation* addresses South Africa's futures from political, economic and social perspectives. His three most recent books, *Africa First! Igniting a Growth Revolution* (March 2020), *The Future of Africa: Challenges and Opportunities* (April 2021), and *Africa Tomorrow: Pathways to Prosperity* (June 2022) take a rigorous look at the continent as a whole.

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