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The Role of Climate Financing for Green Growth and Development

HANNAH SACK

higher education & training
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SABTT South African BRICS Think Tank
NATIONAL INSTITUTE FOR THE HUMANITIES AND SOCIAL SCIENCES

About this project

In partnership with the South African BRICS Think Tank and the National Institute for the Humanities and Social Sciences, the South African Institute of International Affairs (SAIIA) has initiated a research project entitled 'BRICS Shaping Economic Cooperation for Green Growth, Development and the Just Transition: Partnership between Brazil and South Africa'.

The objective of the project is to contribute towards shaping a Global South economic cooperation agenda that supports green growth, development and a just transition in targeted countries and in global economic governance forums. This will be achieved through research, policy dialogues, network development and capacity-building activities centred on Brazil's and South Africa's approaches to the just transition.

A study of Brazil and South Africa can provide important shared learnings regarding the interconnectedness of climate change responses with other instruments relating to trade, technology, social protection and financing. Such learnings are relevant for how BRICS and other developing countries shape their own transitions to a new economic and social paradigm, as well as how they engage and help shape transforming the global climate and economic governance architecture.

The project focuses on four key themes:

- strengthening the multilateral trade system for green growth and development;
- climate finance for green growth and development;
- reskilling of affected communities in the fossil fuel intensive sector; and
- technology for green growth and industrialisation.

Among the project outputs will be the following:

- a Brazil–South Africa climate and just transition dialogue platform to contribute towards a community of practice focused on the green growth, economic cooperation and development concerns of the Global South;
- a series of working papers on each of the project themes;
- an edited volume; and
- a foresight workshop exploring the trajectory for the development of a Global South-friendly climate governance architecture through enhanced BRICS economic cooperation.

The project will support the appointment of a South African research fellow, who will complete the fellowship at SAIIA and the project's Brazilian partner institute, the Institute of Applied Economic Research/Instituto de Pesquisa Econômica Aplicada (IPEA).

Introduction

Climate-induced disasters are increasingly putting strain on the finances of middle- to low-income countries. Growing vulnerability to climate change, coupled with high rates of poverty and low levels of development, exacerbates this financial strain, further deepening the debt burden of many developing countries worldwide. While it is predicted that BRICS could make up 50% of the global economy by 2040, South Africa and Brazil are still highly reliant on external climate financing to meet their development goals and achieve their Nationally Determined Contributions (NDCs).1 With both South Africa and Brazil aiming to become carbon neutral by 2050, the need to secure sustainable climate finance is becoming increasingly urgent. South Africa's high reliance on coal has resulted in major climate financing deals, such as the $8.5 billion Just Transition Package, announced at COP26 in 2021.2 Subsequent to the initial Just Energy Transition Partnership deal, the value of pledges has risen to $12.8 billion.3 Brazil has also received significant climate finance support, being the top recipient of multilateral climate finance in Latin America between 2003 and 2023.4 With rapidly growing populations and national development concerns, South Africa and Brazil need to continue securing climate finance while developing efficient national policy instruments to successfully support national green growth and development.

In support of this, recent global discussions have centred around the need for global financial architecture reform, making finance more readily accessible and affordable for countries in the Global South.[5] A major focus of the G20 meetings, currently hosted by South Africa, is to lower the cost of capital for developing economies.[6] Considering this and the current global geo-political dynamics centred around climate and energy, it is important that both South Africa and Brazil position themselves as important international partners for sustainable development under initiatives such as the Paris Agreement and the 2030 Agenda for Sustainable Development. Through enhanced BRICS collaboration, there is potential for cross-learning between South Africa and Brazil with regard to efficient climate finance planning and procurement, while also developing strong partnerships for collaboration on climate and sustainable development.

The shift towards global financial reform and what this means for emerging economies

Climate and development have consistently been priorities at numerous global political meetings. Recent examples of high-level gatherings where these issues featured prominently include BRICS summits, G20 summits, sessions of the UN General Assembly and COPs to the UN Framework Convention on Climate Change (UNFCCC). These forums regularly address the interconnected

[1] Monique Vanek, "Growing BRICS Alliance to Rival G-7- Led World Order," *Bloomberg*, August 21, 2023.
[2] The International Partners Group includes United Kingdom, Germany, France, the European Union, Denmark and the Netherlands. Spain, Switzerland and Canada made additional pledges that brought the overall figure to $12.8 billion. The US withdrew from the International Partners Group in 2025.
[3] Foreign, Commonwealth & Development Office (FCOD, United Kingdom), "Just Energy Press Release Share Template," Press Release, March 19, 2025.
[4] Charlene Watson, Liane Schalatek, and Aurélien Evéquoz, "Climate Finance Regional Briefing: Latin America" (Climate Funds update, ODI and Heinrich Böll Foundation, February 2024), 3.
[5] Institute for Energy Economics and Financial Analysis, "Enhancing access to multilateral climate funds by developing countries: A way forward," March 2024.
[6] Ashraf Patel, "G20 Summit: A Mountain to Climb for Africa," Institute for Global Dialogue, 26 May 2025.

challenges and opportunities in climate action and sustainable development. The first Africa Climate Summit, held in Nairobi in September 2023, was an important milestone to position a common agenda for Africa on climate finance priorities ahead of COP28. These forums also continue to build consensus on the need to reform the International Monetary Fund (IMF) and the World Bank. Countries from the Global South, including South Africa and Brazil, have been notable advocates in this regard, noting the significant barriers developing countries face in accessing finance, as well as the high transaction costs associated with trade and foreign investment. For example, developing countries have to pay approximately eight times more than developed countries to access finance from multilateral development banks (MDBs).[7]

Some of the recent developments on global financial reform and climate finance:

- At **COP29,** in November 2024, the New Collective Quantified Goal (NCQG) for climate finance was established. The previous target was $100 billion per year by 2025.[8] The new target was set at $300 billion per year by 2035.[9] This represents the minimum amount that is to be mobilised by developed countries for climate action by developing countries. A much larger aspirational figure of $1.3 trillion per year is also mentioned in the goal.[10] This figure calls for all actors to work towards mobilisation, with a significant increase in private investment, alongside public funds. Despite the latest NCQG being three times the amount of the previous figure, it still falls short of the trillions needed by developing countries to financing climate action. The International Institute for Sustainable Development has argued that the fourth Financing for Development Conference, scheduled for July 2025, is a significant opportunity to advance climate financing for developing countries, given that the adaptation finance gap is estimated to be between $194 billion and $366 billion per year for these countries.[11]
- At **COP28**, in November 2023, the Loss and Damage Fund was operationalised with the aim to provide financial relief to vulnerable countries that experience unavoidable losses from climate change. While the fund saw over $700 million in commitments, this covers only 0.2% of the irreversible losses incurred by developing countries from climate change impacts.[12] In addition, the decision to host the fund at the World Bank has raised concern among developing countries regarding the influence of Western interests over the distribution of the funds. Formal outcome documents also, for the first time, recognised the need to 'transition away from fossil fuels'; a pledge was signed by 130 countries to triple renewable energy supply by 2030. Reflections on climate finance again noted developed countries' failure to deliver on the annual $100 billion commitment.
- At the **Summit for A New Global Financing Pact**, held in Paris in June 2023, heads of state and representatives of the private sector, non-governmental organisations and civil society discussed a way forward to restructure the international financing system to address climate change, biodiversity decline and poverty. Discussions called for debt

[7] Sustainable Energy for All, "Key Outcomes of the First Africa Climate Summit," September 21, 2023; see also Patel, "G20 Summit."
[8] United Nations, "Finance & Justice," accessed June 17, 2025.
[9] UN trade & development, "Countries agree $300 billion by 2035 for new climate finance goal – what next?," accessed June 17, 2025.
[10] United Nations Climate Change, "COP29 UN Climate Conference Agrees to Triple Finance to Developing Countries, Protecting Lives and Livelihoods," November 24, 2024.
[11] Maribel Hernandez, "FfD4 Countdown: Vulnerable countries need sufficient climate finance, but it must also be tailored to their needs," International Institute for Sustainable Development, 23 May 2025.
[12] Nina Lakhani, '$700m pledged to loss and damage fund at Cop28 covers less than 0.2% needed', The Guardian, December 6, 2023.

restructuring and the IMF and the World Bank were encouraged to identify conditions under which concessional finance could be mobilised to respond to development challenges in debt-burdened countries.[13] The summit also proposed new financial prospects for Africa. Given the high and rising levels of debt across the continent, the African Development Bank (AfDB) proposed a solution that would enable developed countries to channel part of their Special Drawing Rights (SDRs) to poorer countries through MDBs, thereby preserving the asset status of the SDR while unlocking large amounts of finance for developing countries.[14] Given that Africa received just $33 billion out of the total $650 billion SDR allocation made by the IMF in August 2021,[15] the solution posed by the AfDB could see major financial benefits for the continent and for Latin America. The IMF has since accepted the proposal, which offers the opportunity to lend at least $4 for every $1 equivalent of SDRs through MDBs.[16]

- At the **2023 Africa Climate Summit**, under the theme 'Driving Green Growth and Climate Finance Solutions for Africa and the World', the Nairobi Declaration was adopted by African heads of state. It includes a call to MDBs to mobilise at least $500 billion a year in concessional finance.[17] The declaration also calls for better deployment of SDRs for climate and development in Africa, with a request to create a 'new SDR issue for climate crisis response of at least the same magnitude as the COVID19 issue ($650 billion)'.[18] The summit recognised the need for innovative debt restructuring and relief interventions and advocated for the adoption of a universal carbon tax regime, as well as the development of a new Global Climate Finance Charter by 2025.
- The G20 Leaders' Declaration for 2024, issued at the **2024 G20 Rio de Janeiro Summit**, included several significant statements related to climate finance. The G20 gave a strong political signal of support for scaling up climate finance, endorsing the NCQG process and emphasising the importance of MDB reform and mobilisation of private sector finance. The declaration reaffirmed the need for trillions of dollars in investments over the coming decade worldwide to adapt to the effects of climate change and respond to environmental challenges, including biodiversity protection. During its year as president of the G20, Brazil established the Task Force for the Global Mobilization against Climate Change (Task Force Clima), which for the first time coordinated the responses of the Sherpa and Finance tracks to enhance global macro-economic and financial alignment for all countries to implement the goals of the Paris Agreement.
- During the **2023 G20 New Delhi Summit**, the Sustainable Finance Working group developed the G20 Sustainable Finance Report. The report includes a series of recommendations aligned to specific financing priorities.[19] The New Delhi's Leader's Declaration set out key recommendations, such as the need to mobilise $5.8–$5.9 trillion from developed countries

[13] Summit for a New Financing Global Pact, "Chairs summary of discussions at the Summit of a New Financing Global Pact," June 23, 2023.
[14] Mpofu Sthandile, "International community welcomes African Development Bank initiative on IMF Special Drawing Rights," June 28, 2023.
[15] African Development Bank Group, "FAQS: What are Special Drawing Rights and why do they matter for Africa?," 2022.
[16] IDB, "IDB and AfDB Welcome IMF Executive Board's Decision Approving Use of SDRs for Hybrid Capital Instruments," May 15, 2024.
[17] AU Commission, *The African Leaders Nairobi Declaration on Climate Change and Call to Action* (Nairobi: AUC, 2023).
[18] AU Commission, *African Leaders Nairobi Declaration*.
[19] These priorities include: (1) Mechanisms for Mobilisation of Timely and Adequate Resources for Climate Finance; (2) Policy Measures and Financial Instruments for Catalysing the Rapid Development and Deployment of Green and Low-Carbon Technologies; (3) Scaling-up the adoption of social impact investment instruments; (4) Improving Nature-related Data and Reporting; (5) G20 Technical Assistance Action Plan; (6) Overcoming data-related barriers to climate investments. In addition, the members have finalised the compendium of case studies on financing SDGs and the compendium on non-price policy levers to support sustainable investments.

prior to 2030 to help developing countries achieve their NDCs. It also recommended reforming MDBs' processes and reaffirmed various international commitments, such as the mobilisation of $100 billion by 2020 and annually to 2025 by developed countries.[20] Another prominent outcome of the summit was the formal adoption of the AU into the bloc.

- The **16th BRICS Summit**, held in Kazan, Russia in October 2024, served as a platform for the expanded bloc to collectively advocate for a more equitable and robust global climate finance architecture. It emphasised the historical responsibilities of developed nations, pushed for larger and more accessible funding for developing countries and explored alternative financial mechanisms to support their sustainable development and climate action. Notably, while reiterating the principles and provisions of the UNFCCC, the Kyoto Protocol and the Paris Agreement, the Kazan Declaration highlights the principles of equity and common but differentiated responsibilities and respective capabilities.[21] This underscores the bloc's stance that developed countries, historically responsible for the bulk of emissions, have a greater obligation to provide climate finance. BRICS leaders also stated their support for the New Development Bank to expand local currency financing and strengthen innovation in investment and financing tools.[22]
- At the **2023 15th BRICS Summit** in Johannesburg, leaders expressed a desire to reform the global financial architecture, and the BRICS New Development Bank announced plans to increase local currency lending by 30% between member countries, thereby reducing reliance on the US dollar.[23] In August 2023, the bank completed an auction for its first South African rand bonds, raising a total of ZAR[24] 2.67 billion ($236 million) in bids.[25] Brazilian President Luiz Inácio Lula da Silva has shown a keen interest in developing a unit currency to facilitate easy, transparent and affordable trade between BRICS countries.[26] BRICS has expanded to include a total of 10 countries – the original Brazil, Russia, India, China and South Africa, along with Egypt, Ethiopia, Iran, Indonesia and the United Arab Emirates.[27] BRICS[28] now includes five of the world's major oil producers and four of the world's major natural gas producers.[29] Like the G20, the BRICS group has made no formal commitment to phase out fossil fuels, despite the Johannesburg Declaration calling for a just and affordable transition to low carbon development. The BRICS expansion has been accompanied by the emergence of new energy geopolitical trends, which could have major implications for climate financing in the Global South. The recent US–Iran conflict triggered a temporary spike in international oil prices due to concerns over supply disruptions, particularly through the Strait of Hormuz, but markets have since calmed as the risk of wider escalation diminished. While the conflict has not directly impacted climate financing for the Global South yet, there is a risk that heightened geopolitical tensions

[20] Madhav Pai, "G20 Highlights: Climate Finance, Just Transition and Food Security," WRI India.
[21] "Kazan Declaration," October 23, 2024.
[22] "Kazan Declaration".
[23] Romy Chevallier, Hannah Sack, and Jordan McLean, "Africa's Wish List for an Ambitious and Equitable COP28," 24 November 2023.
[24] Currency code for the South African rand.
[25] Silk Road Briefing, "BRICS New Development Bank Issues First South African Rands Bonds," August 16, 2023.
[26] Nokukhanya Mntambo, "Brazil's Lula backs common BRICS trade unit but wants to keep national currency," *Eyewitness News*, August 23, 2023.
[27] See "BRICS Member Countries Update," updated 28 June 2025. Eleven member countries are listed there, but Saudia Arabia has not yet officially joined the group, though it has not explicitly rejected the invitation to join either.
[28] The six new countries to join the BRICS bloc include Argentina, Egypt, Ethiopia, Iran, Saudi Arabia, and the United Arab Emirates (UAE).
[29] Jordan McLean, "The Expanded BRICS Can Be a Force to Be Reckoned With in Shaping a New World Energy Order," *News24*, September 26, 2023.

could shift political attention and resources away from long-term global climate commitments.[30]

- The **2024 World Bank and IMF meetings** held in Washington DC showed the institutions' continued efforts to integrate climate finance into their core operations and increase their financial contributions. In the 2024 financial year, the World Bank Group invested $42.6 billion in climate finance.[31] This represented a 10% increase compared to the previous financial year, with the World Bank committing 45% of its annual financing to climate action by 2025. Recognising that mitigation has been receiving a larger proportion of financing than adaptation, the World Bank committed to equal amounts of financing for mitigation and adaptation.[32]
- At the **2023 World Bank and IMF meetings** held in Morocco, World Bank Group president Ajay Banga said that the bank would focus on climate change and would look to increase the speed of accessing finance, noting that it could take up to 27 months for a project proposal to be approved. Banga also said that the bank would leverage its newly established private sector investment lab to crowd in more private sector investment for developing countries.[33]

With Brazil holding the G20 presidency in 2024 and South Africa in 2025, the two countries have ample opportunity to set the agenda for enhanced cooperation on global financial architecture reform, while considering what this will mean for their own national climate and development priorities. It is therefore important that they align their national climate financing mechanisms and policy instruments to support global climate financial architecture reform, drawing on best practices and emerging lessons from countries from the Global South.

Carbon pricing mechanisms: The carbon tax and carbon markets

Brazil and South Africa's energy mixes are substantively different, with each country presenting a unique set of challenges that require specific financing instruments. South Africa's economy is coal-dominant, while Brazil's energy mix consists of 88% renewable energy generation. However, this figure should be treated with caution, as hydropower is increasingly viewed with scepticism in terms of its actual renewability – hydropower dams often have negative downstream ecological effects, while damming itself can exacerbate the negative effects of climate change.[34] Brazil is the second largest producer of biofuels worldwide,[35] but it is also the sixth largest emitter worldwide, accounting for roughly 3% of global greenhouse gas (GHG) emissions, mostly from the agriculture sector. Brazil's CO_2 emissions are primarily driven by land-use change, particularly deforestation associated with agricultural expansion. While methane from livestock plays a role, the dominant emission source stems from the clearing of forests – especially in the Amazon – to establish pasture and cropland for soy and beef production. One study using municipality-level data finds that land use-change emissions associated with agricultural products – especially beef and soy – are highly concentrated in key frontier regions, underscoring the spatial and supply

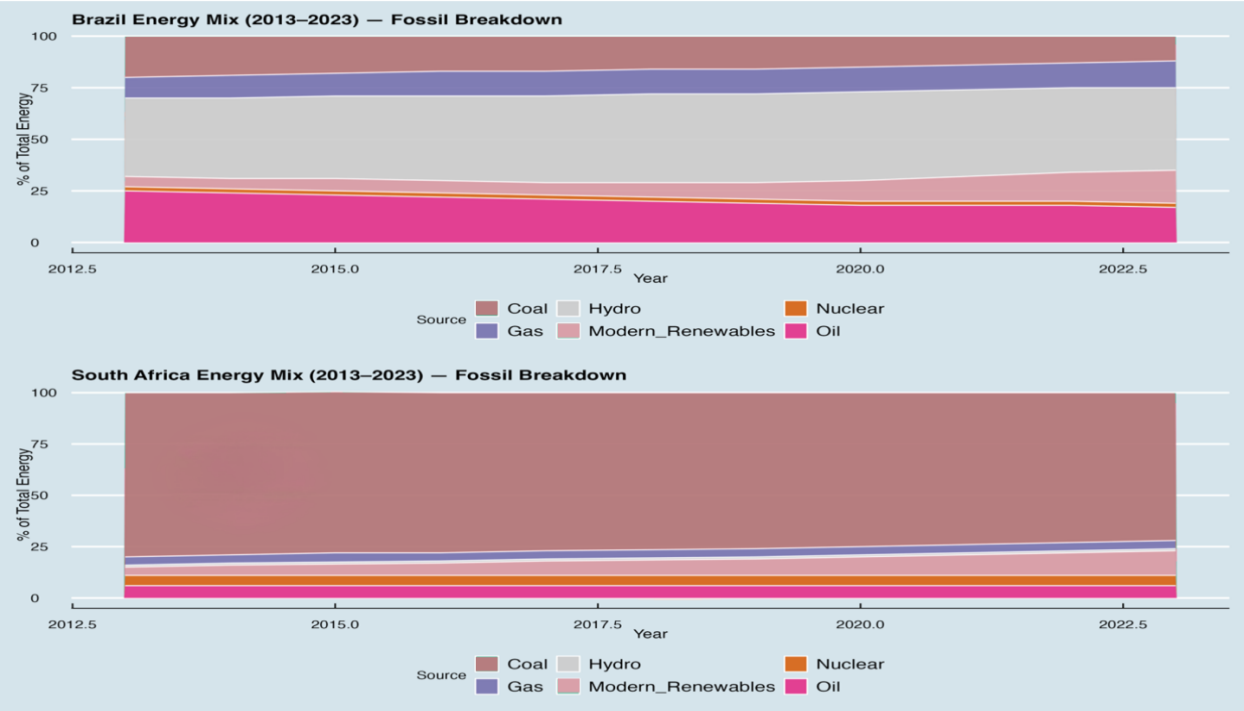
[30] *The Economist*, "The fallout from Trump's Iran strikes is political, too," 26 June 2025.
[31] World Bank Group, "Annual Report 2024," September 29, 2024.
[32] World Bank Group, "Annual Report 2024".
[33] Sophie Edwards, Banga vows to improve World Bank before asking for a capital increase, Devex, October 11, 2023.
[34] See, for instance, Ross Harvey, "Damned if You Dam: Tanzania's Energy Dilemmas," June 2018.
[35] World Economic Forum, 'Finding Pathways, Financing Innovation: Tackling the Brazilian Transition Challenge White Paper', (Geneva: WEF, 2023), 5.

chain-specific nature of Brazil's carbon footprint. [36] Another analysis highlights how weakened governance and policy rollbacks have allowed deforestation – and associated emissions – to accelerate, undermining earlier conservation gains.[37]

South Africa is currently the 14th largest emitter of CO_2 worldwide and the largest emitter on the continent. Its CO_2 emissions are overwhelmingly driven by coal combustion, particularly through its electricity and synthetic fuel sectors. Eskom, the national electricity utility, is the country's largest emitter – responsible for over 200 million tonnes of CO_2 annually – due to its reliance on coal-fired power.[38] Sasol follows as the second-largest point-source emitter, producing over 60 million tonnes of CO_2 per year through coal-to-liquid fuel and petrochemical processes.[39] Together, these two entities account for the majority of South Africa's energy-related emissions. Although transport, industry and agriculture also contribute, they remain secondary in scale. The country's dependence on coal infrastructure – and the slow pace of renewable energy deployment – remains the central barrier to decarbonisation. Efforts to diversify South Africa's energy mix have been constrained by political, financial and institutional inertia, limiting the pace of decarbonisation despite policy commitments under the Just Energy Transition framework and the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP), which was largely successful until it stalled. The government also released a Renewable Energy Masterplan at the end of the first quarter of 2025. While commentators are generally positive about it, they emphasise that it will require credible and swift institutional support to be successful.[40]

[36] D.F.T. Garofalo et al., "Land-use change CO_2 emissions associated with agricultural products at municipal level in Brazil," *Journal of Cleaner Production* 370 (2022): 133450.
[37] W. D. Carvalho et al., "Deforestation control in Brazil: A conservation struggle being lost as agreements and policies are subverted and disregarded," *Perspectives in Ecology and Conservation* 17, no. 3 (2019): 122–130.
[38] Eskom Holdings SOC Ltd., "Integrated Report 2023," 2023.
[39] Sasol Ltd., "Sustainability Report 2023," 2023.
[40] R. Amansure, "South Africa finally has a masterplan for a renewable energy industry: here's what it says," 14 April 2025.

Figure 1. Brazil and South Africa's energy mix (2013–2013)



Source: Compiled by the author with assistance from ScholarGPT, drawing on publicly available data from the International Energy Agency (IEA), BP Statistical Review of World Energy and Our World in Data for the period 2013–2023. Where disaggregated data was unavailable, fossil fuel categories (coal, oil and gas) were estimated.

Current challenges facing transition pathways in Brazil and South Africa are greatly varied, with Brazil's biggest concerns centring on deforestation and emissions from agriculture. South Africa has faced power blackouts due to insufficient investment in supply capacity since 2007, combined with weak transmission infrastructure and just transition challenges due, partially, to high employment in the coal-mining industry.41 Carbon pricing mechanisms in each country are therefore vastly different. However, with both currently facing similar development concerns, there is opportunity for cross-learning regarding national interventions that support just transition pathways.

Currently, there are 75 carbon taxes and emission trading schemes globally.[42] This includes South Africa, which was the first African country to adopt a carbon tax policy. The tax was introduced in 2019, covering 90% of all emissions, and excludes the agriculture, forestry, land use and waste sectors.[43] It was initially set at ZAR 120 (approximately $7) per tonne of CO_2 and currently sits at

[41] The Minerals Council of South Africa estimates that roughly 98,000 jobs in the sector (of a total of 479,000) are directly coal-related. See "Comprehensive Facts and Figures Pocketbook 2024," accessed 1 July 2025.
[42] World Bank, *State and Trends in Carbon Pricing 2024* (Washington, 2024).
[43] International Monetary Fund, 'South Africa Carbon Pricing and Climate Mitigation Policy', (IMF: Washington, 2023), 1.

ZAR 190 (approximately $10) per tonne of CO_2. Initially, the tax was meant to be implemented in three phases, with the final stage being in line with global carbon pricing between $20 and $30 per tonne.[44] The intention of the phased approach was to give companies enough flexibility to transition to renewable energy technologies while offering large tax-free thresholds, allowances and carbon offsets. This was expected to last until 2023. However, the government has delayed the implementation of the second phase of the tax, which will now only come into effect in January 2026. This has resulted in the somewhat low effectiveness of South Africa's carbon tax, specifically given that Eskom, the country's coal-based utility monopoly, has benefitted from tax-free exemptions.[45] Sasol has, similarly, faced sustained criticism from civil society groups and investors for its climate and sustainability disclosures, which many argue lack transparency and credibility.[46] While the government intends to increase the tax to at least $20 per tonne of CO_2 by 2026 and up to $120 per tonne of CO_2 beyond 2050, forecasting models predict that this alone will not be enough to meet the country's NDCs.[47] Tax exemptions and delays in full implementation continue to impede the effectiveness of the tax's contribution to both national and international climate goals. For example, while South Africa's carbon tax covers nearly 10 times more emissions than that of Colombia, the revenues generated by each country in 2022 were nearly the same.

In addition to the carbon tax, the National Assembly passed the Climate Change Bill on 24 October 2023.[48] On 23 July 2024 the president of South Africa signed the Climate Change Bill into law, officially enacting it as the Climate Change Act, No. 22 of 2024.[49] Subsequently, on 17 March 2025 the president proclaimed the commencement of the Act.[50] The Act is intended to function as the country's overarching legal framework for coordinating climate change responses across different government spheres. It requires the Department of Forestry, Fisheries and the Environment (DFFE) to establish a national GHG emission trajectory, sectoral emission targets, GHG emission thresholds and company-level carbon budgets[51] to be reviewed every five years. Entities that are granted carbon budgets are required to submit GHG mitigation plans to the DFFE, with non-compliance resulting in a maximum fine of ZAR 5 million (about $290,000).[52] The public sector has voiced its concern that implementation of the Act will result in companies being liable for double penalties, i.e., fines for emitting more than allocated in their carbon budget and having to pay tax on top of these emissions. As an interim solution, the government has implemented a higher carbon tax of ZAR 640 (about $37) per tonne of CO2 for GHG emissions exceeding carbon budget

[44] Deloitte, 'South Africa's carbon tax: Changes and implications for tax payers', February 1, 2023
[45] It is estimated that annual carbon tax revenues from Eskom would amount to R11.5 billion when exemptions run out.
[46] Critics, including Just Share and the Centre for Environmental Rights, have accused the company of greenwashing—publishing climate commitments that are not meaningfully aligned with science-based targets or South Africa's decarbonisation pathway. Key concerns include Sasol's continued investment in coal-to-liquids (CTL) technology, lack of a concrete plan for absolute emissions reductions, and failure to provide clear timelines for transitioning to low-carbon alternatives. Despite publishing roadmaps and scenario-based disclosures, watchdogs argue these fall short of international best practice and do not meet the urgency required by climate science. See this briefing by Just Share, for instance: https://justshare.org.za/wp-content/uploads/2024/11/241111_Sasols-2024-climate-disclosures.pdf, accessed 1 July 2025
[47] International Monetary Fund, 'South Africa Carbon Pricing and Climate Mitigation Policy', (IMF: Washington, 2023), 4. Moreover, it is increasingly clear that global carbon pricing is currently too low to render a sufficient reduction in emissions possible to avoid the 1.5 degree warming threshold. See, for instance, Hänsel, M.C., Drupp, M.A., Johansson, D.J.A. et al. Climate economics support for the UN climate targets. Nat. Clim. Chang. 10, 781–789 (2020). https://doi.org/10.1038/s41558-020-0833-x
[48] Parliamentary Monitoring Group, "Climate Change Bill (B9-2022)," Accessed June 10, 2025.
[49] For an analysis of the Act, see Siyobi B, "Climate Change Act and the role of local government," Policy Briefing, Good Governance Africa, November 2024.

[50] Parliamentary Monitoring Group, "Climate Change Bill (B9-2022)".
[51] A carbon budget is the "amount of GHG emissions an entity is allowed to emit over at least three successive five-year periods."
[52] Francois Joubert and Julia Rushton, 'Key Aspects of South Africa's much-anticipated Climate Change Bill", June 9, 2022

allocation, with no additional penalty for non-compliance.[53] However, there is no indication of how such penalties will be dealt with when the carbon tax becomes fully operational.

Brazil has not yet implemented a carbon tax. The country does, however, have an active voluntary carbon market, owing to the potential for investments in the UN Scheme Reducing Emissions from Deforestation and Forest Degradation (REDD+) in forest-rich areas like the Amazon. This voluntary carbon market gives Brazilian companies the opportunity to buy and trade carbon credits to offset their GHG emissions. Under Jair Bolsonaro's presidency, there was an attempt to regulate the market through the creation of the National System for Greenhouse Gas Reduction, which set out sectoral emission reduction targets. Under Lula's presidency, however, the decree has been revoked and instead a Draft Law for an Emissions Trading Scheme (ETS) has been developed.[54] The Draft Law, to be overseen by the Inter-ministerial Climate Change Committee, enforces emissions caps on companies that emit more than 25 000 tonnes of CO2 (excluding the agriculture sector) and reporting requirements on companies that emit more than 10 000 tonnes of CO2 per year.[55] The law also recognises the rights of Indigenous peoples through a benefit-sharing mechanism and ensures that they are compensated should they incur any damages as a result of carbon credit projects.[56] It is intended that the ETS will become fully operational within four to five years. While the formalisation of the ETS will assist Brazil in meeting its carbon neutrality goals, the scheme has been criticised for its exclusion of the agriculture sector, which is the highest emitting sector in the country. Although Lula has reasserted Brazil's environmental leadership through sharp reductions in deforestation and more ambitious climate pledges, his administration has made limited progress in directly addressing emissions from the agriculture sector, which remains heavily influenced by powerful agribusiness interests. As scholar Jonathan Proksch notes, the Lula government's climate strategy has focused on forest governance and international diplomacy, while avoiding structural confrontation with emissions-intensive supply chains linked to beef and soy – sectors central to Brazil's export economy and deeply embedded in its rural political bloc.[57]

The IMF and the World Trade Organization (WTO) are advocating for an international carbon pricing floor among large emitters. This is to encourage more ambitious carbon prices that can help close the gap between pledges and policy and 'keep 1.5 alive' – the effort to keep global warming to below 1.5°C (above pre-industrial levels). Currently, the World Bank recommends ranges of between $40 and $80 per tonne of CO_2 by 2025, and ranges between $50 and $100 per tonne of CO_2 by 2030. The IMF has recognised the need for lower carbon price thresholds for developing countries, advocating for prices between $25 and $50 per tonne of CO_2 by 2030.[58] As indicated earlier, there is a strong sense emerging in the academic literature that this pricing is excessively low if the goal is to incentivise a lower-carbon future.

According to the World Bank's 'State and Trends in Carbon Pricing 2024', revenues from carbon pricing mechanisms have exceeded $100 billion for the first time, with ETSs continuing to account for the highest share of revenues.[59] The average price of carbon, however, is still well below what is required to finance the ambitions of the Paris Agreement. Countries are also beginning to apply

[53] International Monetary Fund, 'South Africa Carbon Pricing and Climate Mitigation Policy', (IMF: Washington, 2023), 6.
[54]International Carbon Action Partnership, 'Brazil introduces draft law for cap-and-trade system' September 11, 2023.
[55] International Carbon Action Partnership, 'Brazil introduces draft law for cap-and-trade system.'
[56] International Carbon Action Partnership, 'Brazil introduces draft law for cap-and-trade system.'
[57] Proksch, Jonathan. "Bolsonaro and Lula: A Comparative Study of Climate Policy in Brazil," The Grimshaw Review of International Affairs Vol 2, No. 1 (2025): 343 – 357.
[58] Bloomberg and Lameez Omarjee, 'Govt slows carbon tax rollout that Eskom feared - but carbon taxes will be heftier from 2026,' News 24, February 23, 2022.
[59] World Bank, *State and Trends of Carbon Pricing 2024* (Washington, 2024).

national protectionist schemes that will influence the global price of carbon and national economic development. For example, the European Carbon Border Adjustment Mechanism (CBAM) came into effect in 2023 (but is still in its transitional phase). It imposes a tariff on imported goods that requires EU importers to pay the difference between the price of carbon in the country of origin and that of the price of carbon under the EU ETS. The objective is to equalise the price that domestic producers pay under the EU ETS with that of imported goods.[60] As such, CBAM could reduce African exports to the EU by as much as 5.7%, holding serious implications for national economic growth.[61] To ensure such unilateral carbon pricing measures take into account equity concerns, it is important that developing countries and affected communities are included in the final design and consultation processes of such measures. There are also concerns that CBAM amounts to a form of non-tariff barrier to trade, which is illegal under the General Agreement on Trade and Tariffs (GATT) that underpins membership of the WTO.

Trading of carbon credits has also increased rapidly in recent years. This poses an opportunity for biodiversity-rich countries such as Brazil to capitalise on such markets. For example, in 2022, 54% of newly generated carbon credits came from nature-based solution projects.[62] In line with this trend, Brazil's climate policy architecture has shifted to reflect a prioritisation of natural capital (e.g., through the development of the Forest and Carbon Programme 2020 and the National Payment Policy for Environmental Services) and the potential for these initiatives to support the generation of carbon credits.

Policy incentives to finance South Africa's just transition

Policy-driven incentives in South Africa are aiding the country's transition to renewable energy. For example, the Integrated Resource Plan lays out pathways to diversify South Africa's energy mix through investments in solar, wind, hydro and gas. As indicated earlier, the Department of Mineral Resources has also released a Renewable Energy Masterplan, which outlines plans for renewable energy generation and storage up to 2030. The Green Transport Strategy (2018–2050) aims to address the increasing emissions profile of the transport sector through investments in cleaner fuel alternatives and green energy infrastructure.[63] The Hydrogen Society Roadmap 2021 provides a framework for stimulating the integration of hydrogen-related technologies into various sectors, while promoting economic development in line with the country's National Development Plan 2030.[64]

While these policies outline ambitious plans to drive the country toward green growth, there is a need to ensure consistency and alignment in policy implementation that can support efficient regulatory and financing instruments. For example, while the carbon tax, climate bill and supporting policies will increase national revenues for green investment, it is necessary to couple these with transformative policies that will ensure a just transition and safeguard the livelihoods of the most vulnerable people, specifically coal mine workers and their dependents. In addition,

[60] Olivia Rumble and Andrew Gilder, 'The Impact of the CBAM on African Economies and the Role of the AfCFTA,' (Johannesburg: South African Institute of International Affairs, 2024).
[61] Olivia Rumble and Andrew Gilder, 'The Impact of the CBAM on African Economies and the Role of the AfCFTA.'
[62] International Monetary Fund, 'South Africa Carbon Pricing and Climate Mitigation Policy'.
[63] IISD, 'South Africa Launches Green Transport Strategy,' July 2, 2019,
[64] Department of Science and Innovation, 'Hydrogen Society Roadmap for South Africa 2021' (Pretoria: Department of Science and Innovation, 2021).

coordination between policies, along with consistency in reporting and measurement that does not result in the duplication of financial burdens on the private sector, will be important to secure public support for the government's transition plans.

In this regard, in 2020 the Presidential Climate Commission was established to oversee South Africa's just energy transition. Since its establishment the commission has engaged extensively with civil society and published the Just Energy Transition Framework, which outlines actions to be taken by government and partners to achieve the just energy transition in the short, medium and long term. In 2022 the commission established the Climate Finance Task Team and has since developed the Just Energy Transition Investment Plan (JET-IP) 2023–2027, which was launched at COP27 in Egypt in 2022. The JET-IP identifies $98 billion 'in financial requirements over five years to begin South Africa's 20-year energy transition'.[65] The plan also pays significant attention to building capacity in local municipalities, which face several funding challenges, including poor procurement practices, dilapidated distribution grids, unmaintained sub-stations, increasing debt burdens and deepening poverty.[66] Three key priorities for investment are outlined in the JET-IP: the electricity sector, new energy vehicles and green hydrogen. It also places an emphasis on decommissioning coal plants that are due to be retired, thereby helping South Africa to overcome its energy crises while moving toward more renewable generation. Skills development of coal mine workers and affected communities is also prioritised in the plan. South Africa's JET Partnership has been a catalyst for the development of similar funding arrangements in other countries, including Vietnam, Indonesia and Senegal.[67]

Green taxonomies and the role of private sector financing

To encourage investments in sustainable and development-focused initiatives, several governments have begun developing green finance taxonomies. Green taxonomies are needed to both encourage green investment and reduce 'greenwashing' by determining evaluation and screening criteria that businesses will have to satisfy to claim 'green/ sustainable' status for their given initiative. Green taxonomies can help stimulate private sector and international investment in green projects by de-risking investments. They can also support well-informed decision-making on projects that align with national climate and development goals. In addition, taxonomies can assist financial institutions to develop relevant financing instruments and financial policies to support investments that are classified according to the taxonomies' climate requirements.

South Africa published its Green Finance Taxonomy in 2022.[68] The taxonomy was developed by the Taxonomy Working Group under the country's Climate Risk Forum, following the launch of

[65] European Commission, "Joint Statement: South Africa's Just Energy Transition Investment Plan" November 7, 2022.
[66] Jan Vanheukelom, ' Two years into South Africa's Just Energy Transition Partnership: How real is the deal?' (Maastricht: European Centre for Development Policy Management, 2023).
[67] Nicholas P. Simpson, Michael Jacobs, and Archie Gilmour, "Taking stock of Just Energy Transition Partnerships: A review of Just Energy Transition Partnerships in South Africa, Indonesia, Vietnam and Senegal, and prospects for country sector platforms" (Policy brief, ODI, 2023), 1, "https://media.odi.org/documents/ODI-SM-JustEnergyTransition-PB-Nov23-Proof03.pdf".
[68] National Treasury, Republic of South Africa, and the International Finance Corporation, "Green Finance Taxonomy," March 2022.

National Treasury's 'Financing a Sustainable Economy 2021'.[69] Much of its design is aligned to the EU's taxonomy, given the technical robustness of the EU design, and allows for a high level of interoperability. Both taxonomies are underpinned by the objective of achieving net-zero by 2050; however, the EU Taxonomy Regulation requires mandatory disclosures whereas South Africa's green finance taxonomy is currently voluntary.[70] Increased investments in green initiatives as a result of the taxonomy could also help reduce the country's carbon tax rate, as South Africa progresses to meet its mitigation goals.

In 2011 South Africa launched the REIPPPP, which aims to stimulate private sector investment in renewable energy generation, which is then fed back into the national grid through a competitive tender process. Given that approximately 7% of the country's total energy mix is renewable, the programme offers an opportunity to expand that percentage while stimulating private sector investment and public–private partnerships (PPPs).71 The programme was initially highly successful and lauded internationally as a transparent, effective PPP.72 There have, however, been several implementation challenges. The programme was halted from 2015 to 2019. This was due to a variety of factors, including the poor transmission network and carrying capacity of the national grid,73 as well as pushback from former energy minister Gwede Mantashe, who has been an advocate of coal-based energy generation. One recent journal article that analyses the socio-political barriers to an energy transition in South Africa notes that 'policy interventions must seek to realign South Africa's Minerals Energy Complex towards a just transition pathway committed to renewable electrification, community empowerment, and sustainable socio-economic structures'.74

In 2020 the Risk Mitigation Independent Power Producer Procurement Programme was introduced in an attempt to close the energy supply gap. In 2022 the fifth round of bids under the REIPPPP was signed, attracting ZAR 34.3 billion (approximately $2 billion) and offering the creation of approximately 7 700 jobs, with connection/operation expected to start in 2025.75 However, given that most coal mines are situated in the provinces of Mpumalanga and Limpopo, and the majority of renewable energy projects are in the Northern Cape (due to the availability of wind and solar), the intended impact of job creation and equity in electricity access has been widely debated. In addition, grid ingestion points for renewable energy supply from both the Northern Cape and Eastern Cape have not been properly developed. Upgrading the national transmission grid to this end is therefore a priority before implementing newly signed projects.76

Brazil is in the process of developing its Sustainable Taxonomy (Taxonomia Sustentável Brasileira [TSB]), with a first version presented for public consultation in early 2025 and mandatory adoption

[69] National Treasury, Republic of South Africa. "Financing a Sustainable Economy", Technical Paper, 2021, https://www.treasury.gov.za/comm_media/press/2021/2021101501%20Financing%20a%20Sustainable%20Economy.pdf, accessed 2 July 2025.
[70] Government of South Africa, National Treasury. South African Green Finance Taxonomy: 1st Edition. (National Treasury, 2022).
[71] CSIR, 'Statistics of power in SA 2022'.
[72] Anton Eberhard, Joel Kolker, and James Leigland, "South Africa's Renewable Energy IPP Procurement Program: Success Factors and Lessons," PPIAF, Washington DC, USA (Washington, DC, 2014), http://www.gsb.uct.ac.za/files/ppiafreport.pdf., accessed 2 July 2025.
[73] Stuart Theobald, "Eskom's Renewable Energy Shocker," *Business Day*, January 9, 2023.
[74] Pegah Mirzania et al., "Barriers to Powering Past Coal: Implications for a Just Energy Transition in South Africa," *Energy Research and Social Science* 101 (July 1, 2023): 103122.
[75] Department of Mineral Resources and Energy, "Minister Gwede Mantashe announces 5th Bid Window of Renewable Energy IPP Procurement Programme (REIPPPP Bid Window 5)," December 8, 2022.
[76] In 2023 the sixth rounds of bids were released, attracting approximately 60 submissions from the private sector.

scheduled for January 2026. [77] At COP28, the Taxonomy Action Plan was launched, which proposes 11 climate, environmental and social objectives that the TSB will address. Specifically, the TSB will develop screening criteria for economic activities in eight sectors, with land-use activities being of particular importance in the context of Brazil's climate finance objectives.

Both the South African and Brazilian taxonomies hold considerable potential for stimulating investment in climate-focused projects (specifically from private sector investors). However, the extent to which they are successfully implemented will depend on several factors. For example, clear guidance on how to use the taxonomy and awareness raising are key to its uptake. In this regard, the South African government has published taxonomy user and disclosure guidance to help market players assess whether their initiatives are taxonomy-aligned.[78] Other factors – such as political and public support for the taxonomy, recognition of the taxonomy's design by international investors and whether the taxonomies will eventually require mandatory disclosures – will determine their success in channelling finance toward national sustainable initiatives. The World Bank also recently published guidelines on developing national green taxonomies with the intent to stimulate green taxonomy development in emerging markets. While all climate finance taxonomies will be similar in terms of the design of overarching goals, project specifications and sectoral coverage are likely to differ between countries depending on what their most pressing climate challenges are. Indeed, the drivers of climate change, and the sectors most vulnerable to its impacts, differ widely across developing country contexts. Thus, while the principles behind a universal taxonomy are sensible, emphases must be context-specific and investors must understand that interventions will yield returns on the basis of being appropriately specified for local contexts.

The role of central banks in financing green growth and development

Climate change affects the stability of financial systems through three avenues: physical risks, transition risks and liability risks. Physical risks include damage to firms and assets because of climate change. For instance, wind, fire or flood damage from extreme weather events jeopardises the physical integrity of property. Transition risks include the cost to companies due to an inability to transition to low-carbon pathways. For instance, continued dependence on coal-fired power will become increasingly costly, both literally and in terms of future capital borrowing costs. And liability risks include the cost to financial institutions as a result of claims for compensation against damages faced from climate change. Insurance companies are increasingly dealing with these risks. Climate change affects price stability in national and international markets, and failing to include environmental risks and stress testing in central banking policy will undermine financial stability at the onset of climate shocks. Importantly, though, a recent review of the academic literature states the following:[79]

> *The transition risk literature has focused near-exclusively on global warming. Methodological considerations have revolved around high-carbon stranded asset*

[77] "Brazil Publishes Draft Sustainable Taxonomy Framework for Public Consultation", Law.com, January 24, 2025. https://www.lw.com/en/insights/brazil-publishes-draft-sustainable-taxonomy-framework-for-public-consultation
[78] Carbon Trust, South Africa's Ambitious Green Finance Taxonomy Briefing Paper, 10.
[79] Louis Daumas, "Financial Stability, Stranded Assets and the Low-Carbon Transition – A Critical Review of the Theoretical and Applied Literatures," *Journal of Economic Surveys* 38, no. 3 (July 1, 2024): 601–716.

accounting and greenhouse gas emissions. However, the climate is only one of the nine planetary boundaries we must remain within. Biodiversity losses, ambient pollution, deforestation and others are all relevant threats. Facing them must be considered part and parcel of a broader ecological transition. The concept of transition risks should also encompass these dimensions. Related methodological challenges should be urgently faced.

According to Basel III, under the Basel Committee on Banking Supervision, three pillars are key to regulating the financial sector, namely: minimum capital requirements, supervisory review and market discipline.[80] With regard to climate change, minimum capital requirements can ensure financial institutions have sufficient liquidity available to respond to climate-related shocks. Central banks can also increase their supervision over climate-related risks by enforcing climate-related financial disclosures by market players. This can help to accurately assess the exposure of companies to climate-related risks, and central banks can incorporate these into central bank stress testing to model the impacts of climate-related risks on the financial sector. Climate-related disclosures can also help companies and their clients make more informed investment decisions, thereby facilitating better market discipline.

Globally, central banks and regulators are increasingly acknowledging the impact of climate change on financial stability. In 2017, the Network of Central Banks and Supervisors for Greening the Financial System (NGFS) was established to share best-practice and lessons among members on integrating climate-risk management into the financial sector. The Central Bank of Brazil (Banco Central do Brasil) and the South African Reserve Bank (SARB) are both members of the NGFS and have made significant strides in incorporating climate change into their central banking policies. For example, in 2023 the SARB released a Proposed Guidance Note on Climate Related Risk Practices for Banks. The note builds on the International Sustainability Standards Board's climate disclosure standards, which require climate change to be mainstreamed into banks' financial planning and risk management frameworks.[81] The SARB is also a member of the Sustainable Banking and Finance Network, and a national Climate Risk Forum has been established under the National Treasury.[82]

Brazil's Central Bank requires financial institutions to disclose how they treat environmental risks when determining their capital requirements, which are in line with the Task Force for Climate-related Financial Disclosures. The bank has also enforced rules that will require banks to incorporate climate change-related risks into their stress testing and has enforced restrictions on providing loans to finance projects on Indigenous land or in the Amazon biome.[83] In 2016 the Brazilian Federation of Banks released guidelines for issuing green bonds, and in 2008 the Brazilian Development Bank established the Amazon Fund, a REDD+ mechanism that has supported over 100 projects to date.

Central banks play a crucial role in promoting sustainable investments and the integration of climate considerations into financial operations. However, mandatory disclosure and stress-testing requirements must be accompanied by training and capacity-building initiatives to ensure climate-related risks are adequately understood and integrated into financial operations. The

[80] Climate Transparency, 'The role of central banks in tackling climate change', https://www.climate-transparency.org/wp-content/uploads/2021/08/ODI_role-of-central-banks-in-tackling-climate-change.pdf
[81] Morai Costa, 'South Africa banks may need to take climate and litigation risk into account' August 29, 2023.
[82] South Africa Sustainable Finance Initiative, "Working Groups," Accessed June 7, 2025.

[83] Carolina Mandl, 'Brazil's banks to incorporate climate change risks into stress tests' Reuters, 15 September, 2021.

accompaniment of central bank policymaking with initiatives such as green taxonomies will further instil confidence in green investment, incentivising the private sector to support just transition pathways and green development.

These considerations are especially relevant today, as ESG frameworks face growing scrutiny for enabling superficial sustainability claims and greenwashing. Clear and consistent guidance from central banks can play a critical role in mitigating these risks by setting credible expectations, discouraging misrepresentation and directing capital flows toward genuinely sustainable activities.[84]

Conclusion

Brazil and South Africa have been vocal about supporting the reform of the global financial architecture and, through forums such as BRICS and the G20, have supported the role of green financing in achieving national development priorities. Both countries' development priorities mean that green growth financing must transition away from carbon-intense economic trajectories without jeopardising current economic structures and trade flows – except in instances where those structures are being maintained through political blockages of viable investments at the expense of the countries' future wellbeing.

Both countries are making progress in increasing domestic climate finance investment. Green taxonomies will incentivise private sector investment aligned with the national climate priorities set out in NDCs and other climate-related policies. Carbon pricing mechanisms, such as South Africa's carbon tax and the Brazilian Emissions Trading System, are important mechanisms to accelerate the achievement of limiting global warming to below 1.5°C. While the price of carbon remains a contested and sensitive issue, ensuring that domestic regulation facilitates the green transition while enhancing international competitiveness will remain a priority for the Global South.

While this paper focuses on climate financing for mitigation, financing for adaptation should not be overlooked. Currently, finance for mitigation is 10 times that available for adaptation.[85] Mitigation is also likely to attract a lot more private investment and generate returns, whereas the benefits derived from adaptation investments are more difficult to quantify. Given that Brazil and South Africa are rich in biodiversity, with many rural communities highly vulnerable to climate change, climate finance for adaptation should be mainstreamed into national climate policy and supported through innovative financing mechanisms. While mitigation and adaptation remain critical pillars of the global climate response, they are no longer sufficient on their own to address the full scope of climate injustice experienced by developing economies. As Jeffrey Sachs and co-authors argue in a recent working paper, the escalating impacts of climate change – ranging from extreme weather events to sea-level rise – have already imposed irreversible economic and human losses on countries that contributed the least to the problem. Addressing this inequity requires a robust loss and damage finance mechanism, not merely as compensation but also as a pathway to enable climate-vulnerable nations to recover and pursue low-carbon development strategies. Without such reparative finance, the most affected countries risk being locked into deeper cycles of poverty and emissions-intensive recovery, undermining both global justice and climate goals.[86] While this has not been a specific focus of this paper, it is crucial that green

[84] Simona Galletta et al., "A PRISMA Systematic Review of Greenwashing in the Banking Industry: A Call for Action," Research in International Business and Finance 69 (April 1, 2024): 102262, https://doi.org/10.1016/j.ribaf.2024.102262.

[86] Jeffrey D Sachs et al., "Adaptation, Loss and Damage: A Global Climate Impact Fund for Climate Justice," 2023.

taxonomies build awareness of the importance of lobbying for, and attracting, loss and damage funding.

South Africa and Brazil will need to position themselves as Global South leaders in national climate financing responses that align with the priorities and needs of the Global South. Peer-learning and collaboration through BRICS partnerships should be prioritised to strengthen the bloc's negotiating power, particularly regarding climate finance and development. Moreover, exchanging experiences between BRICS (and the broader Global South) can enhance domestic climate policy frameworks that demand a fairer global order and support the transition toward low-carbon economies.

Policy recommendations

Reform the global financial architecture through sustained multilateral engagement

South Africa and Brazil can use their positions in multilateral forums such as BRICS, the G20 and at the UN General Assembly to champion reforms to multilateral development, including addressing the higher cost of financing for developing countries and rechannelling SDRs through MDBs.

Strengthen carbon pricing mechanisms and eliminate exemptions

Accelerate the implementation of comprehensive carbon pricing systems while eliminating exemptions for major emitters.

Address just transition financing gaps

Develop comprehensive just transition investment plans that address both climate and social equity objectives.

Enhance green taxonomy implementation and private sector engagement

Transition voluntary green finance taxonomies to mandatory disclosure frameworks to increase uptake and effectiveness.

Mobilise private sector investment through risk mitigation

Address structural barriers that impede private sector climate investment, including transmission and distribution infrastructure constraints that limit renewable energy integration.

Strengthen central bank climate risk integration

Central banks should make climate-related stress testing mandatory for all financial institutions, building on current voluntary frameworks and implementing comprehensive climate-related financial disclosure requirements aligned with International Sustainability Standards Board standards with proper enforcement mechanisms.

Expand nature-based solutions and carbon markets

South Africa, Brazil and other biodiverse countries can capitalise on the growing nature-based solutions marker from which 54% of newly generated carbon credits in 2022 emerged, by strengthening forest and other biodiversity governance programmes and developing robust payment mechanisms for environmental services, among other approaches.

Author

Hannah Sack

Hannah Sack was a Climate Change Researcher at the South African Institute of International Affairs.

Kirsten Pearson

Kirsten Pearson is a Climate Finance Researcher at the South African Institute of International Affairs. She has a Master's in Development Studies from the University of Cape Town. She was previously a Deputy Director at the Government Technical Advisory Centre, National Treasury. She was part of a team that developed a Budget Transparency Portal that won a Public Sector Innovation Award. She is the co-author of the best-selling book *Nuclear*.

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