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Great Power Competition and Green Protectionism: The Impact of the US-China Trade War on Global South Countries

Exploring how U.S. and Chinese green protectionist policies impact economies and industries in the Global South.

Great power competition between the United States and China has translated into a trade war featuring, among other issues, green protectionist policies. In the United States, this strategy is used to boost the country's emerging green industries while reducing U.S. reliance on Chinese imports and containing China's rise. Green protectionism is reshaping global trade dynamics and often harms Global South countries. In Africa and in the Caribbean, for instance, countries face restricted access to international markets and worsening economic inequality, limiting their ability to fully benefit from international trade and ensure their own green transitions. This memo explores the impacts of green protectionism on countries in these two regions, underlining challenges and opportunities.

By Aude Darnal, Alicia Nicholls, Kudakwashe Manjonjo, Lethabo Sithole, Preethi Vatadahosahalli

Introduction

During the past year, great power competition and the trade war between the United States and China have worsened and expanded into the realm of the green transition, as the world struggles to respond to the urgent climate crisis. To counter China's dominance in green technology — supported by Chinese subsidies — and reduce its dependency on the Chinese market, the United States enacted the U.S. Inflation Reduction Act (IRA), a law aiming to boost its reindustrialization through tax incentives for domestic producers and tariffs on imports. However, despite the United States'

reliance on markets in the Global South to execute its reindustrialization — notably in terms of imports of critical minerals, tech manufacturing, and high-value-added services — few discussions have focused on the impact of U.S. protectionist policies on its trade and investment partners.

As the United States seeks to boost its domestic industries, on the one hand, protectionist measures need to be scrutinized to ensure they do not reduce critical-minerals-producer countries to mere exporters while reinforcing barriers for these countries to climb the value chain and secure their own green transition. On the other hand, friendshoring could create opportunities for some Global South countries to leverage their economic ties with the United States and favorable geography to attract industries seeking to bolster supply chain resilience.

This policy brief seeks to provide U.S. policymakers with a better understanding of the impact of green protectionism in Africa and the Caribbean and highlights the challenges and opportunities it creates.

US-China “Green Rivalry”: Drawbacks and Opportunities for Caribbean Countries

Alicia D. Nicholls, Research Fellow and Adjunct Lecturer at The University of West Indies, Cave Hill, shares perspectives from Barbados.

“When elephants fight, it is the grass that suffers,” is an African proverb that poignantly captures the risks that small-island developing states (SIDS) face in the escalating US-China competition for global economic dominance. This memo analyzes the possible implications of the United States’ and China’s green industrial policy competition for Caribbean countries.¹ By outlining some strategic recommendations for U.S. and Caribbean policymakers, this brief seeks to inform these actors about the challenges this “green rivalry” poses for Caribbean states and assist them in navigating US-China

¹ By Caribbean, this policy memo limits its analysis to the Member States of the Caribbean Community.

tensions. In addition, it outlines avenues for these states to capture emerging opportunities that will lead to shared dividends with their neighbors.

US-CHINA RIVALRY AND THE CARIBBEAN: WALKING THE TIGHTROPE

China and the United States have a complex relationship marked by codependence and conflict.² This rivalry intensified in 2018 when the first Trump administration unilaterally imposed tariffs on Chinese goods, leading China to retaliate with tariffs on U.S. goods; this pattern has continued under outgoing U.S. President Joe Biden.³ Caribbean nations' historically close relationship with the U.S. and their growing relations with China make them susceptible to the fallout from this geopolitical rivalry.⁴ This rivalry has extended into the realm of green industrial policies, which is ironic because developed countries frowned upon industrial policy only a few years ago.⁵ In 2015, China implemented a ten-year national strategic plan, an industrial policy known as the "Made in China 2025" initiative, with the core goal of promoting China's shift to high-technology manufacturing. Among the strategic tasks and priorities outlined in the document is to fully implement green manufacturing.⁶ A recent Bloomberg report hails

² Stephen S. Roach, *Unbalanced: The Codependency of America and China* (New Haven, Connecticut: Yale University Press, 2017).

³ Chad Bown, "US-China Trade War Tariffs: An Up-to-Date Chart | PIIE," Peterson Institute of International Economics, April 6, 2023, accessed October 19, 2024, <https://www.piie.com/research/piie-charts/2019/us-china-trade-war-tariffs-date-chart>.

⁴ Despite Caribbean countries' efforts to diversify their exports, the U.S. remains the region's largest trading partner. Since 1983, most Caribbean countries' goods have benefited from duty-free access to the U.S. market under the Caribbean Basin Initiative and its constituent acts. The U.S. is also the region's largest tourism source market, the region's main services "export." In addition, the U.S. provides crucial development assistance, including in the areas of climate change, energy, and security, as exemplified by partnership programs like the US-Caribbean Partnership to Address the Climate Crisis (PACC 2030) and the Caribbean Basin Security Initiative. In parallel and despite Caribbean countries' division over the "One China" policy, China has expanded its influence in the Caribbean significantly within the last two decades through increased trade, participation in regional institutions, and the Belt and Road Initiative. Caribbean imports from China have doubled, and Chinese-financed infrastructure projects increasingly dot the region.

⁵ Jakob Hafele et al., "Industrial Policy Is Back. Now What?" Project Syndicate, July 12, 2024, accessed November 1, 2024, <https://www.project-syndicate.org/onpoint/industrial-policy-is-back-now-what>.

⁶ Ben Murphy, "Roadmap of Major Technical Domains for Made in China," *Center for Security and Emerging Technology*, September 9, 2020, accessed October 24, 2024, https://cset.georgetown.edu/wp-content/uploads/t0181_Made_in_China_roadmap_EN.pdf.

the success of this initiative, as evidenced by China’s export performance in an array of technologies.⁷

In the wake of the economic fallout of the COVID-19 pandemic, supply chain disruptions, rising inflation, a worsening climate crisis, and the ongoing US-China trade war, in August 2022, U.S. President Biden signed into law the most consequential piece of climate-change legislation the United States has passed to date.⁸ Known as the “Inflation Reduction Act,” or IRA, its wide mandate is driven as much by climate concerns as it is by geostrategic and economic considerations. Its main objectives are to fight inflation, invest in domestic energy production and manufacturing, and reduce U.S. carbon emissions by roughly 40% by 2030. Even more important, the IRA seeks to reduce America’s dependence on foreign technology. Over 700 pages long, the IRA is a significant initiative under Biden’s Investing in America Agenda.⁹ The act directs \$359 billion toward climate-related initiatives through 2032, including subsidies and other incentives for domestic green industries, and assistance for companies and households that adopt greener technologies.

THE IMPACT OF THE “GREEN RIVALRY” ON CARIBBEAN NATIONS

⁷ Joe Weisenthal and Tracy Alloway, “Almost 10 Years Later, China’s ‘made in 2025’ Has Succeeded,” Bloomberg.Com, October 31, 2024, accessed November 5, 2024, <https://www.bloomberg.com/news/articles/2024-10-31/almost-10-years-later-china-s-made-in-2025-has-succeeded?embedded-checkout=true>.

⁸ “Remarks by President Biden at Signing of H.R. 5376, the Inflation Reduction Act of 2022,” The White House, August 16, 2022, accessed October 20, 2024, <https://www.whitehouse.gov/briefing-room/speeches-remarks/2022/08/16/remarks-by-president-biden-at-signing-of-h-r-5376-the-inflation-reduction-act-of-2022/>.

⁹ “Inflation Reduction Act of 2022,” The Hill, n.d., accessed October 20, 2024, <https://thehill.com/wp-content/uploads/sites/2/2022/08/Inflation-Reduction-Act-of-2022.pdf>; A sister Act to the IRA, the CHIPS and Science Act of 2022 seeks to boost America’s production of semiconductors, strengthen its supply chain resilience, and counter China’s domination in the semiconductor market by providing generous subsidies for U.S. manufacturing and research and development in semiconductors.

Caribbean countries have long advocated for the world’s largest polluters — China and the United States — to engage in an all-out effort to achieve net-zero carbon emissions.¹⁰ Unfortunately, China and the United States’ green industrial policy initiatives appear to be aimed not just at environmental protection but also toward positioning their own companies, through generous subsidies and other incentives, to come out on top of the race toward renewable energy.¹¹ For example, some of the incentives in the IRA are based on using local content, raising concerns of protectionism among many U.S. allies, such as the EU, and has been the basis of disputes brought to the World Trade Organization’s (WTO’s) dispute settlement system.

The fallout for the Caribbean from this “green rivalry” can take at least two main forms. First, Caribbean states lack the ability to effectively compete with subsidized, environmentally friendly goods from these large countries because they are fiscally constrained and lack the financial capacity to provide generous subsidies to their own manufacturers of environmentally friendly products. These heavily subsidized U.S. and Chinese environmental goods enjoy an unfair advantage, not dissimilar to the significant advantage that subsidized developed countries’ agricultural goods have long enjoyed. This perpetuates an international division of labor in which most developing countries remain sources of critical raw materials but are dependent on imports of green technologies from the Global North.

Second, geopolitical tensions and the resort to unilateralism has implications for the global trading system. The current state of the WTO’s appellate body, in abeyance since December 2019, means that any disputes the U.S. and China raise against each other in the WTO’s dispute settlement system over their green industrial policies cannot be

¹⁰ China and the U.S. are the world’s biggest polluters, accounting for 30.1% and 11.3%, respectively, of global greenhouse gas emissions 2024, according to the Emissions Database for Global Atmospheric Research; Net zero means that any carbon emissions created are balanced by taking the same amount of carbon out of the atmosphere. The EU is another example but is outside of this paper’s scope.

¹¹ “World Trade Report 2024 - Trade and Inclusiveness: How to Make Trade Work for All,” World Trade Organization, January 2024, accessed November 15, 2024, https://www.wto.org/english/res_e/publications_e/wtr24_e.htm.

appealed.¹² The rise of unilateralism disrupts the predictability of the multilateral trading system. It also erodes a crucial dispute resolution tool, leaving the world's weakest countries vulnerable to unpredictable and unfair trade policies without reliable recourse. This concern was also raised in the Bridgetown 3.0 document, which notes, “our trading system risks being subverted by geopolitical tensions over the control of resources critical for the energy transition.”¹³

STRATEGIC OPPORTUNITIES FOR THE CARRIBEAN

Caribbean countries have several opportunities to benefit from, but also should consider policies to hedge against, the US-China green rivalry. They can:

Leverage friendshoring initiatives: Supply chain disruptions caused by the COVID-19 pandemic led many multinational companies to implement nearshoring strategies to bolster their supply chain resilience. The United States has also promoted “friendshoring.” First articulated by U.S. Treasury Secretary Janet Yellen in 2022, this strategy involves moving supply chains to trusted political and economic allies with the aim of securely extending market access, lowering the risks to the U.S. economy and to trusted trade partners.¹⁴ Caribbean countries have seized this opportunity to attract investment by courting U.S. companies seeking to nearshore and friendshore. Some strategic sectors include renewable energy, tech manufacturing, and high-value-added services.

Engage in diplomacy and utilize the diaspora. Caribbean policymakers should use their collective voices in extant diplomatic fora like the US-Caribbean Trade and Investment

¹² Request for Consultation by the Republic of China, United States Certain tax Credits under the Inflation Reduction Act, WTO Doc. WT/DS623/1, G/L/1526 https://www.wto.org/english/news_e/news24_e/ds623rfc_28mar24_e.htm.

¹³ “Bridgetown Initiative on the Reform of the International Development and Climate Finance Architecture ,” Bridgetown Initiative, n.d., accessed October 18, 2024, <https://www.bridgetown-initiative.org/>; “Remarks by Secretary of the Treasury Janet L. Yellen on Way Forward for the Global Economy,” U.S. Department of the Treasury, April 13, 2022, accessed November 6, 2024, <https://home.treasury.gov/news/press-releases/jy0714>.

¹⁴ “News from the OPM,” Office of the Prime Minister, July 7, 2022, accessed October 18, 2024, <https://opm.gov.jm/news/jamaica-positions-itself-to-take-advantage-of-nearshoring-and-friend-shoring-opportunities-in-economic-zones/>.

Council (TIC) under the US-Caribbean Trade and Investment Partnership and the China-Community of Latin American and Caribbean States (CELAC) forum to advocate for equitable access to green technologies and sustainable finance. The region should continue to use its collective voice, along with that of other similarly minded states, within the WTO, UN, and other international organizations to advocate for trade rules that insulate small economies from green protectionism. The U.S. is also home to the Caribbean’s largest diaspora population, estimated at over 4.5 million in 2022.¹⁵ The region has a history of lobbying through its diaspora, some of whom have served on Capitol Hill, on other matters, and this issue could be added to that list.¹⁶

Pursue equitable green partnerships. Caribbean countries can engage both the United States and China in dialogues to secure commitments to address the need for green technology access and incentivize sustainable investment in renewable energy and other green sectors in ways that align with the region’s climate action goals. The first of its kind, the Singapore-Australia Green Economy Agreement, albeit between two developed countries, offers a possible model the Caribbean could follow to secure green technology partnerships.¹⁷

RECOMMENDATIONS FOR US POLICYMAKERS

¹⁵ Jane Lorenzi and Jeanne Batalova, “Caribbean Immigrants in the United States,” Migrationpolicy.Org, July 7, 2022, accessed November 5, 2024, <https://www.migrationpolicy.org/article/caribbean-immigrants-united-states#:~:text=Approximately%204.5%20million%20Caribbean%20immigrants,later%20settled%20in%20New%20York>.

¹⁶ Signed into law by President Barack Obama on December 18, 2016, H.R. 4939 — the US-Caribbean Strategic Engagement Act of 2016 — was the most comprehensive legislative attempt to strengthen US-Caribbean relations since the passage of the Caribbean Basin Economic Recovery Act of 1983, the founding act of the Caribbean Basin Initiative. Section 2 of the US-Caribbean Strategic Re-Engagement Act affirms that U.S. policy is to increase engagement with the Caribbean through four actors: government, the Caribbean diaspora community, the private sector, and civil society. All these important actors can be leveraged to assist the region in moving toward the use of renewable energy.

¹⁷ “Singapore-Australia Green Economy Agreement,” Australian Government Department of Foreign Affairs and Trade, n.d., accessed November 1, 2024, <https://www.dfat.gov.au/geo/singapore/singapore-australia-green-economy-agreement>.

US-China “green rivalry” presents both challenges and opportunities for Caribbean nations. As countries that are on the frontlines of the climate crisis, Caribbean countries have a vested interest in decarbonization efforts by the world’s two biggest polluters but also in ensuring that these efforts do not undermine their own ability to meet their climate targets. The elephant in the room is whether the incoming Trump administration will continue the Biden administration’s climate action measures.¹⁸

The United States has a vested interest in the security of the Caribbean — a region it has long viewed as its “third border.” Although the Caribbean does not rank high on Washington’s trade agenda, security cooperation with the Caribbean remains of paramount importance to U.S. interests. While drug trafficking and migration are among the region’s key security issues, Caribbean states also seek economic and energy security. The fallout from more powerful hurricanes and the inability of Caribbean countries to meet their adaptation and climate mitigation needs, including through equitable access to green technologies, pose a security risk for the region because these factors could destabilize these countries’ economies. Stable Caribbean economies would reduce the propensity for criminality and the flow of illegal migrants to the United States — a key touchpoint for US-Caribbean relations. Therefore, it is within the United States’ vital security interests to ensure the economic stability of Caribbean countries, including by proactively working with the region on issues pertaining to equitable access to green technologies and building capacity to move to a green transition. Moreover, increasing technical assistance and funding for Caribbean renewable energy efforts has the twin benefit of assisting countries’ mitigation efforts while improving their energy security. Finally, the United States should use the existing programs and the TIC to work with the region on these matters, including encouraging investment in the region by U.S. green technology firms seeking to nearshore their operations. A special technical working

¹⁸ The previous Trump administration rolled back many Obama-era climate regulations via executive orders.

committee with representatives from the U.S. and Caribbean should be established to address these issues.

Africa’s Green Industrialization Needs, Trump 2.0, and a Changing China

Kudakwashe Manjonjo, Just Transition Associate and Lead on Critical Minerals-Green Industrialization work at Power Shift Africa, sharing perspectives from Zimbabwe.

INTRODUCTION

U.S. President-elect Donald Trump will be re-entering the White House in January 2025 with an international landscape that has radically shifted since his first administration. Conflicts between Russia and Ukraine, as well as Israel and Hamas, and great power competition between the United States and China, will be the Trump administration’s foreign policy priorities. Nonetheless, African states should not be overlooked because they are critical economic partners for the United States — and equally important to U.S. national security.

Africa contains over 30% of the world’s critical minerals reserves.¹⁹ The climate crisis and growing calls for de-carbonized industries, as well as the United States’ efforts to diversify its markets to access critical minerals, which are also essential for products such as microchips, should encourage the Trump administration to review its engagement with Africa. The United States’ green protectionist policies and its limited engagement with Africa on technology transfers and green energy investments will leave Washington playing second fiddle to Beijing in relation to Africa for the foreseeable future. Meanwhile, some nations, such as the Democratic Republic of the Congo (DRC), Morocco, Tanzania, and Zambia, are leveraging the US-China trade war to secure deals that advance their interests.

¹⁹ Jordan McLean and Adrian Joseph, “The Geopolitics of Energy Minerals: How Africa Can Lead the Green Energy Transition,” South Africa Institute for International Affairs, July 23, 2024, accessed November 5, 2024, <https://saiia.org.za/research/the-geopolitics-of-energy-minerals-how-africa-can-lead-the-green-energy-transition/>.

US PROTECTIONIST POLICIES

The United States' renewable energy policy, signed under President Joe Biden in the IRA in August 2022, takes advantage of the sizable U.S. market for green projects and incentivizes domestic production of critical minerals.²⁰ The IRA also encourages the “re-shoring” and friend-shoring of supply chains to reduce dependency on countries like China. The legislation targets products such as semi-conductors and solar panel technology and provides tax credits for U.S. consumers. However, by intentionally blocking Chinese-made products and industries, the act also limits U.S. opportunities for friend-shoring partnerships in Africa. For example, any project with more than 25% involvement from Chinese firms cannot access the act's funds. This places the United States at a disadvantage in key areas of potential investment such as copper/cobalt mines in the DRC, where Chinese firms control 80% of the supply chain from large mines.²¹ Moreover, Trump has repeatedly described the Inflation Reduction Act a “green scam.”²² During the next Trump administration, the act will most likely be changed to curtail its climate adaptation and mitigation impact. However, Trump's plans to reduce China's influence in Africa might also lead his administration to promote mutually beneficial partnerships with African countries. Such a move, coupled with the U.S. interest in securing more access to mineral resources, could lead to his administration re-designing the IRA in a manner that provides more benefits to Africa. Illustratively, during the first Trump administration, his flagship program toward Africa, “Prosper Africa,” was supported by the establishment of the International Development Finance Corporation, and focused on providing financing for infrastructure projects, critical minerals, and energy, which Africa could benefit from.

²⁰ The Inflation Reduction Act of 2022, H.R 5376, Pub. L No. 117-369, (2022) <https://www.congress.gov/bill/117th-congress/house-bill/5376/text>.

²¹ “Cobalt in the Democratic Republic of Congo,” The World Bank , June 1, 2021, accessed November 5, 2024, <https://documents1.worldbank.org/curated/en/099500001312236438/pdf/P1723770a0f570093092050c1bddd6a29df.pdf>.

²² Emily Peck, “Trump Wants to ‘Terminate’ Green Spending. Here's What Could Stand in His Way,” Axios, October 28, 2024, accessed November 6, 2024, <https://www.axios.com/2024/10/28/trump-climate-law-ira-pullback>.

CHINA'S ECONOMIC SLOWDOWN

The Africa-China relationship has been fruitful for most African nations since the creation of the Forum on China-Africa Cooperation (FOCAC) in 2000, with meetings held triennially. The Chinese public and private sector have secured long-term critical mineral offtake and supply agreements; in exchange, China has invested heavily in Africa's infrastructure development and plans to support Africa's integration into global value chains and industrialization projects.²³ However, the recent Chinese economic slowdown has led to a gradual reduction in Chinese investment in Africa. At the most recent FOCAC meeting, in September 2024, China pledged to invest about \$50 billion, which is less than the \$60 billion that Beijing pledged in 2019; most of the 2024 investment will be loan-based, as opposed to grants and development assistance.²⁴ This has created a window of opportunity for other global powers to gain some traction in Africa, especially because several African leaders seek additional investments, notably in the form of technology transfers and increased value addition to African minerals.²⁵

A GROWING AFRICAN COALITION

Considering these global circumstances, Africa's green policies are also changing. To take full advantage of the boom in the critical minerals market, Africa's civil society is pushing African Union member states to speak and act with one voice to harness their collective power and get better trade deals. For instance, the African Union's Africa Green Minerals Strategy, calls for an African Critical Minerals Club structured similarly to the Organization of Petroleum Exporting Countries. Meanwhile, projects such as the

²³ An offtake agreement is an arrangement in which a buyer agrees to purchase or sell a substantial amount of a producer's future output. Value addition in the mining sector refers to the process of enhancing the value of raw minerals before export, through processing and beneficiation; "Forum on China-Africa Cooperation Beijing Action Plan (2025-2027)," Ministry of Foreign Affairs, the People's Republic of China, September 5, 2024, accessed November 10, 2024, https://www.mfa.gov.cn/eng/xw/zyxw/202409/t20240905_11485719.html.

²⁴ Kevin Gallagher and Tianyi Wu, "China-Africa at the 9th FOCAC: Partnerships, Pledges, and Plans," (PowerPoint, Boston University, Global Development Policy Center, 25 October 2024).

²⁵ Robert Daniels, "DRC Set for New Cobalt Beneficiation Facility," *African Review of Business and Technology*, October 24, 2023, accessed November 10, 2024, <https://africanreview.com/mining/drc-set-for-new-cobalt-beneficiation-facility>.

Lobito Corridor — a “multilateral plan to connect the DRC and Zambia to European and North American markets via the Port of Lobito in Angola” — demonstrate practical ways to enhance regional cooperation and coordination.²⁶

Regional cooperation will benefit from market expansion and achieving economies of scale, and it is in the interest of global superpowers to support these efforts. Indeed, these efforts can lead to better-structured economic environments — through the standardization of border control systems, increased labor mobility, cohesive tax and royalty frameworks, and infrastructure-sharing of midstream industries — which are repeatedly called for by international trade and investors.

Unfortunately, coordination among African states is hampered by competition among major economies and competition within Global South countries, which is creating a “green” race to the bottom. On the one hand, advanced economies seek to secure minerals for their national green transitions; on the other hand, producer countries strive to secure investments to process their minerals. This inevitably leads to countries with similar minerals undercutting each other by, for example, removing or weakening regulations to attract investors. Nevertheless, some African nations, like Morocco, have managed to take advantage of competition for their resources. Morocco has entered into free trade agreements with other African countries, the United States, the European Union, China, and some Middle Eastern countries.²⁷ DRC, Zambia, and Tanzania have made critical minerals investment and trade deals with both the United States and China, demonstrating their intent to benefit from the current competitive global environment.

²⁶ Chris Ògúnmodéde, “The Empty Promises of the US-EU Lobito Infrastructure Project,” *Stimson Center*, April 15, 2024, accessed November 10, 2024, <https://www.stimson.org/2024/the-empty-promises-of-the-us-eu-lobito-infrastructure-project/>.

²⁷ Amin Mohseni Cheraghlou, “Diversification and Growth: How the US-Morocco FTA Boosts Rabat’s Modern Trade,” *Atlantic Council*, July 1, 2024, accessed November 10, 2024, <https://www.atlanticcouncil.org/blogs/menasource/morocco-usa-fta-trade-twenty-years/>.

MOVING AFRICA UP THE VALUE CHAIN

The Lobito Corridor project is an example of the United States' supporting critical minerals investment and regional coordination in Africa.²⁸ However, the project has faced significant criticism by experts who decry its lack of emphasis on investment in African countries' mineral processing and downstream capacities. Such shortcomings keep African states at the bottom of the value chain, limit their opportunities for economic advancement and for addressing poverty, and further entrench existing inequalities in global trade.²⁹

Supporting industrialization through technology transfers and investments in processing capacities required in midstream mineral smelting and refining industries is not simply about climate adaptation, a topic that Trump sees as specious. It is also about ensuring that the United States unlocks diverse value chains and markets for legacy chip manufacturing and broadening the success of the Africa Growth and Opportunity Act beyond just a few countries.³⁰ For example, in May 2024, “the U.S. Trade and Development Agency signed a grant agreement with Kenyan technology company Semiconductor Technologies Limited for a feasibility study to develop a new semiconductor fabrication facility that will help diversify and strengthen global supply chains for legacy chips that are used in numerous commercial applications.”³¹

²⁸ The White House, “Joint Statement from the United States and the European Union on Support for Angola, Zambia and the Democratic Republic of the Congo’s Commitment to Further Develop the Lobito Corridor and the U.S.-EU Launch of a Greenfield Rail Line Feasibility Study,” Press Release, September 9, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/09/09/joint-statement-from-the-united-states-and-the-european-union-on-support-for-angola-zambia-and-the-democratic-republic-of-the-congos-commitment-to-further-develop-the-lobito-corridor-and-the/>.

²⁹ David Hundeyin, “Lobito Corridor Plan Illustrates Stark Poverty of American Imagination in Africa,” *Pan African Review*, September 12, 2024, accessed November 11, 2024, <https://panafricanreview.com/lobito-corridor-plan-illustrates-stark-poverty-of-american-imagination-in-africa/>.

³⁰ Landry Signe, “Here’s Why US-Africa Trade under AGOA Has Been Successful for Some Countries but Not Others,” *Brookings Institution*, June 14, 2023, accessed November 10, 2024, <https://www.brookings.edu/articles/heres-why-us-africa-trade-under-agoa-has-been-successful-for-some-countries-but-not-others/>.

³¹ “USTDA Partners with Kenya to Boost Semiconductor Manufacturing,” *USTDA*, May 24, 2024, accessed November 10, 2024, <https://www.ustda.gov/ustda-partners-with-kenya-to-boost-semiconductor-manufacturing/>; Nii Simmonds and Ayodele Okeowo, “Why Africa Could Host the next Semiconductor Ecosystem,” *World Economic Forum*, July 17, 2024, accessed November 18, 2024, <https://www.weforum.org/stories/2024/07/why-africa-could-provide-the-next-semiconductor-ecosystem-for-the-chip-business/>.

Trump has made clear that the United States' reindustrialization and keeping China at bay will be the focus of his mandate. However, such endeavors cannot occur without promoting Africa's industrial development because doing so will ensure that the United States secures partnerships for imports and friendshoring. Moreover, bolstering African development will keep American industry competitive at a time when China has already positioned itself as the primary economic partner of many African states.

CONCLUSION

The changing industrialization climate requires a new approach to Africa's position in the global green transition value chain: moving from one where Africa is primarily a supplier of raw materials to recognizing that the continent is playing a key role in averting the climate crisis. Even with a new administration that is skeptical of climate change, U.S. policymakers should realize that supporting African states' industrialization will favor U.S. national security interests. The United States' own reindustrialization relies on global markets, and partnering with African countries will also ensure that the U.S. remains competitive.

African industrialization is also a necessary component to address some of the root causes of violent extremism, such as economic inequality, in regions such as the Horn of Africa and West Africa, where the United States is engaged.³² Reversing these negative trends will require the incoming Trump administration to consider Africa *and* China as partners, amidst U.S. efforts to reindustrialize the country and move away from a zero-sum strategy towards green industrialization. Dismissing concerns about climate and rising economic inequality would in the long run impede the whole world's — including the United States' — human and economic development, as well as overall security.

³² Alex Thurston, "Like Biden, Don't Expect Trump to Pay Much Attention to Africa," *Responsible Statecraft*, November 15, 2024, accessed November 18, 2024, <https://responsiblestatecraft.org/trump-africa/>.

Navigating the Impact of the Inflation Reduction Act on South Africa’s Green Economy

Lethabo Sithole, Managing Director at Amila Africa, shares perspectives from South Africa.

In response to the urgent need for climate action, major economies are enacting legislation and policies reshaping the green economy and the global trade landscape. Among these is the U.S. IRA of 2022, which allocates a record \$369 billion in subsidies and tax incentives to accelerate the country’s green transition.³³ This act not only incentivizes American-made green technologies but also discourages reliance on foreign inputs through “green protectionist” measures, favoring U.S.-sourced minerals and promoting the reshoring of green technology production. While the IRA represents a strong commitment to U.S. climate goals, it also introduces challenges and opportunities for resource-rich countries like South Africa. As a significant exporter of platinum group metals (PGMs), manganese, and vanadium – essential minerals for green technologies such as hydrogen fuel cells, electric vehicle (EV) batteries, and renewable energy infrastructure – South Africa is positioned to play a central role in global clean energy supply chains. However, lacking a free trade agreement (FTA) with the United States, South Africa faces restricted access to IRA incentives, which place it at a competitive disadvantage relative to FTA partners. These include production and investment tax credits for renewable energy generation and clean technology manufacturing (e.g., solar panels, wind turbines, batteries, and EVs); grants and tax credits for critical minerals extraction, processing, and recycling, with preferential access for FTA partners; clean vehicle tax credits of up to \$7,500, contingent on sourcing battery materials and components from the U.S. or FTA countries; financial incentives for renewable energy projects utilizing domestically produced components; bonus credits for meeting

³³ “The Inflation Reduction Act’s Benefits and Costs,” U.S. Department of the Treasury, March 1, 2024, accessed November 1, 2024, <https://home.treasury.gov/news/featured-stories/the-inflation-reduction-acts-benefits-and-costs>.

domestic content requirements; and manufacturing support to establish facilities producing clean energy technologies. This analysis examines the implications of the IRA for South Africa’s trade and industrial policy, balancing the associated risks and opportunities while outlining strategic pathways to bolster South Africa’s position in the global green economy.

GREEN PROTECTIONISM AND MARKET DISTORTION IN CRITICAL MINERALS

The IRA's green protectionism has reshaped U.S. trade preferences, favoring FTA partners for green technology imports and imposing new barriers for non-FTA countries, including South Africa. This policy undermines the competitiveness of South African minerals, such as PGMs and other resources critical to EV batteries, hydrogen fuel cells, and renewable energy storage systems. While South Africa exported over \$35 billion in minerals in 2021, including \$11 billion in PGMs, these resources now face diminished U.S. demand because of IRA restrictions that incentivize U.S. domestic production and imports from FTA-aligned countries.³⁴ This situation raises concerns about compliance with the WTO’s Agreement on Trade-Related Investment Measures (TRIMs), which prohibits trade distortions and discrimination against foreign products.³⁵ The EU, South Korea, and Japan have expressed specific objections, arguing that the IRA's localization requirements, such as subsidies favoring North American-made electric vehicles and components, are discriminatory. China’s complaint to the WTO, which has led to the establishment of a dispute panel, also challenges the IRA's tax credits as discriminatory, reinforcing the need for South Africa to consider expanding

³⁴ Council for Geoscience, “CGS Mandate,” paper presented by the Council for Geoscience at Northwest Provincial Mining and Energy Investment Conference, Rustenberg, South Africa, January 2022. https://www.dmre.gov.za/Portals/0/Energy_Website/files/Mining/MiningInvestmentConference/Mining-and-Energy-Investment-Conference-Council-for-Geoscience.pdf.

³⁵ World Trade Organization. 2019. “WTO Trade and Investment.” Wto.org. 2019. https://www.wto.org/english/tratop_e/invest_e/invest_info_e.htm.

local beneficiation efforts or strengthening trade relations beyond the U.S. market to secure more advantageous positions in global green supply chains.³⁶

CHALLENGES AND OPPORTUNITIES FOR SOUTH AFRICA’S CRITICAL MINERALS SECTOR

South Africa’s reliance on raw mineral exports without local processing remains a major barrier to maximizing its green economy potential. Currently, 83% of the country’s PGM output is exported with minimal local processing, forfeiting significant downstream economic value.³⁷ Local beneficiation — or processing minerals domestically — could increase the export value of South African minerals by as much as 300%, according to estimates from the South African Department of Mineral Resources and Energy.³⁸ The South African government has initiated beneficiation projects, including through entities like the PGM Industrial Development Corporation, yet greater investment and strategic focus are necessary to realize the benefits of local processing.

The absence of an FTA with the United States also limits South Africa’s automotive industry, one of the largest in Africa, as it seeks to transition to EV production. In 2021, the automotive sector contributed 4.3% to South Africa’s GDP and employed over 110,000 people.³⁹ Without an FTA, South African-made EVs face steep tariffs and are excluded from U.S. incentives aimed at supporting clean technology imports, such as those outlined in the IRA. This exclusion limits South Africa’s competitiveness, particularly as the United States encourages green manufacturing within its own borders or with trade

³⁶ Beneficiation is the treatment of raw material (such as iron ore) to improve its physical or chemical properties, especially in preparation for smelting.

³⁷ Peter Major, “South African PGMs on the up for Now,” Business Media MAGS - A Leader in Industry-Related B2B Magazines, Current, Relevant Informative Content, accessed November 6, 2024, <https://businessmediamags.co.za/mining/sa-mining/south-african-pgms-on-the-up-for-now/>.

³⁸ “MINERAL BENEFICIATION PORTFOLIO COMMITTEE on TRADE and INDUSTRY.” 2020. <https://www.thedtic.gov.za/wp-content/uploads/Beneficiation19-June2020.pdf>.

³⁹ “Hydrogen Energy Technologies to Drive Demand for Africa’s PGMs,” Energy Capital & Power, June 19, 2024, accessed November 12, 2024, <https://energycapitalpower.com/hydrogen-energy-technology-to-drive-demand-for-africas-pgms/>.

partners that have strong domestic supply chain incentives. To remain viable in the global green economy, South Africa must either strengthen trade terms with the U.S. through cooperative agreements or pivot toward regions where trade terms are more favorable. For example, the EU, which has already shown strong demand for African EV materials and offers reduced tariffs through its Economic Partnership Agreements, could be a viable alternative. In addition, aligning with China and emerging Asian markets, which have robust EV supply chains, could offer South Africa a pathway to export growth.⁴⁰

GEOPOLITICAL COMPETITION AND STRATEGIC PARTNERSHIPS

The global shift toward clean energy is also shaped by the intense geopolitical competition between the U.S. and China, influencing South Africa's potential green supply chain partners. China dominates the refining of key minerals, including 60% of the world's lithium and 65% of cobalt, by investing heavily in domestic beneficiation and establishing a powerful green technology export market.⁴¹ By fostering investment in mineral processing facilities and advancing its technological capabilities, South Africa could similarly position itself as a supplier of refined, high-value products within the green economy.

To realize this shift from raw material exporter to refined product supplier, South Africa will need a well-balanced strategy that leverages both domestic and foreign investments in mineral processing infrastructure, drawing on partnerships with both Western and Eastern economies. China's Belt and Road Initiative has brought substantial investment

⁴⁰ Nyasha Nyaungwa, Nelson Banya, and David Evans, "Namibia Bans Export of Unprocessed Critical Minerals Reuters," Reuters, June 8, 2023, accessed November 10, 2024, <https://www.reuters.com/markets/commodities/namibia-bans-export-unprocessed-critical-minerals-2023-06-08/>.

⁴¹ Calvin Augustine, "SA Automotive Sector," SA Automotive Sector | South African Government, February 21, 2024, accessed November 10, 2024, <https://www.gov.za/blog/sa-automotive-sector>.

to Africa, particularly in infrastructure, in exchange for access to critical minerals.⁴² In 2022 alone, China invested approximately \$5 billion in African projects, cementing its role as a vital economic partner.⁴³ In this context, South Africa could pursue technology transfer agreements with China to bolster its beneficiation facilities, while also incorporating high social and environmental standards to enhance its green-sector capabilities without compromising economic sovereignty.

OPPORTUNITIES FOR SOUTH AFRICA IN THE GLOBAL GREEN ECONOMY

Demand for renewable technologies, particularly in hydrogen and EV markets, is projected to drive global consumption of PGMs, manganese, and vanadium by 4.47% by 2029, according to market research firm Mordor Intelligence.⁴⁴ This trend places South Africa in a prime position to benefit from increased demand for these critical minerals. The hydrogen economy alone, anticipated to reach a valuation of \$2.5 trillion by 2050, could be transformative for South Africa, given PGMs' centrality to hydrogen fuel cell technologies.⁴⁵ Investing in beneficiation and establishing processing partnerships could enable South Africa to capture more value within green supply chains, creating jobs and fostering sustainable industrial growth.

⁴² European Commission. n.d. "Access2Markets EPA SADC - Southern African Development Community," Trade.ec.europa.eu, <https://trade.ec.europa.eu/access-to-markets/en/content/epa-sadc-southern-african-development-community>.

⁴³ Lei Bian et al., "China's Role in Accelerating the Global Energy Transition through Green Supply Chains and Trade," London School of Economics Grantham Research Institute for Climate Change and the Environment, February 1, 2024, accessed November 12, 2024, <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2024/02/Chinas-role-in-accelerating-the-global-energy-transition-through-green-supply-chains-and-trade.pdf>.

⁴⁴ Chido Munyati, "Understanding Evolving China-Africa Economic Relations," World Economic Forum, June 25, 2024, accessed November 12, 2024, <https://www.weforum.org/stories/2024/06/why-strong-regional-value-chains-will-be-vital-to-the-next-chapter-of-china-and-africas-economic-relationship/>.

⁴⁵ Ito Mashino, "UAE and Saudi Arabia Lead the Decarbonization of the Middle East," Mitsui & Co., December 1, 2021, accessed November 10, 2024, https://www.mitsui.com/mgssi/en/report/detail/_icsFiles/afieldfile/2022/01/21/2112e_mashino_e.pdf.

RECOMMENDATIONS FOR SOUTH AFRICA POLICYMAKERS

In light of a potential shift in U.S. policy to prioritize economic partnerships over conventional foreign aid, South Africa has a unique opportunity to position itself as a key player in the global green economy by securing strategic support from the United States. Drawing from policy instruments such as the African Growth and Opportunity Act (AGOA) – currently being considered by U.S. Congress for renewal and improvement, the African Continental Free Trade Area (AfCFTA), and international technology-sharing agreements, the following recommendations aim to maximize South Africa's economic potential. These recommendations would also advance global sustainability goals and interests in resilient supply chains and regional stability.

1. **Strengthen mineral beneficiation and diversify the value chain to enhance resilience and economic security:** South Africa's mineral sector is primed to benefit from investment in beneficiation, specifically in processing and value addition, to reduce dependence on raw mineral exports. By shifting toward refined mineral production, South Africa can retain greater economic value and diversify away from raw exports, contributing to long-term economic stability and resilience. Drawing on models like Namibia's and Zimbabwe's local beneficiation policy for lithium, South Africa can set clear guidelines that ensure investment in infrastructure while offering incentives to attract foreign direct investment in downstream processing.
2. **Take advantage of technology transfer and green finance initiatives:** Pretoria should be on the lookout for green finance opportunities, which the United States could offer in order to lower the barriers to green technology adoption. By structuring these mechanisms to align with U.S. interests in African markets, the United States can both promote its green technology industries and secure new export markets. Such a move would allow South Africa to accelerate its own transition toward sustainable industrial sectors, supporting climate goals and reducing emissions while building a resilient green economy. An initiative to

lower the barriers to green tech adoption would align with a policy shift toward investment-based partnerships, providing a mutual pathway toward climate and economic resilience.

3. **Negotiate green trade concessions and facilitate AfCFTA-aligned market access for South Africa’s sustainable products:** South Africa could advocate for extended market access under AGOA and explore future trade agreements to open U.S. markets to South Africa’s green products, particularly in critical mineral supply and sustainable manufacturing. To navigate the tension between AfCFTA objectives and potential new bilateral trade agreements, South Africa could work closely with AfCFTA policymakers to ensure any concessions align with continental trade integration efforts. By collaborating on a coordinated strategy, the U.S. and South Africa can align trade policies that advance regional self-sufficiency while enabling the U.S. to secure African sources of critical minerals and sustainable goods. Such an approach would demonstrate a balanced economic partnership that aligns with AfCFTA principles without undermining regional trade priorities.
4. U.S. green protectionism creates both challenges and opportunities for South Africa and further economic partnerships between the two countries. However, it remains to be seen how the newly elected U.S. president, Donald Trump, a climate skeptic who might surround himself by critics of South Africa’s government, will address cooperation with this regional power.⁴⁶

⁴⁶ Julian Pecquet, “Trump Taps Staunch South Africa Critics for Top US Diplomatic Posts,” *Africa Report*, November 12, 2024, accessed November 13, 2024, <https://www.theafricareport.com/368109/trump-taps-staunch-south-africa-critics-for-top-us-diplomatic-posts/>.

Conclusion

Thus far, the U.S. policy sector has given little attention to the impact on Global South countries of the U.S.-China rivalry's expansion into the green industrialization realm. This is shortsighted, as the United States struggles with a major crisis of legitimacy due to its incapacity to support the reform of the world order toward a system that is equitable and ensures the distribution of globalization's dividends to all. International trade rules for thee — not for me — cannot work.

To understand the consequences of green protectionism on Global South countries, it is necessary to look at countries' specific contexts, as opportunities and challenges arising from U.S. green protectionist measures differ. That being said, the three study cases presented in this report offer several considerations for policy experts exploring this topic.

U.S. green protectionism may offer both opportunities and present challenges for Global South countries. In terms of challenges, on the one hand, there is a risk that U.S. tariffs and subsidies will consign critical-minerals-producer countries to the bottom of the value chain. On the other hand, Caribbean states can leverage friendshoring to attract U.S. investments in renewable energy and high-value services. Morocco is such an example of how this can work; its experience also highlights how China has been able to circumvent the IRA, by leveraging the FTA between Morocco and the United States.⁴⁷ In both cases, however, all parties should ensure that Global South nations can execute their own green transitions and secure economic dividends for their populations rather than simply being considered the factories for powerful states. At the same time, both Western and Global South governments should increase their efforts to address the

⁴⁷Yanga Mancini, "Chinese EV Investments in Morocco Surge Following U.S.," *Business Tech Africa*, July 5, 2024, accessed November 13, 2024, <https://www.businesstechnafrica.co.za/motoring-2/2024/07/05/chinese-ev-investments-in-morocco-surge-following-u-s-subsidies/>.

detrimental impact of critical mineral exploitation on the environment and human rights.

For the U.S. and other Western nations, a more equitable approach to green protectionism — one that encourages technology transfer, financial aid, and fair-trade policies — is critical. Supporting the green economy and clean energy transition of the Global South aligns with the broader goals of climate resilience, economic stability, and global security. Sidelining these needs risks further exacerbating global divides and undermining the shared benefits of a sustainable future.

A few weeks away from the inauguration of President-elect Donald Trump, it remains to be seen what the next Trump administration's strategy vis-à-vis green protectionism will be. On the one hand, incoming U.S. Vice President J. D. Vance has criticized the IRA. On the other hand, major U.S. businesses are hoping for its continuation.⁴⁸ U.S. policymakers seeking to support the U.S. domestic economic landscape and long-term trade, investment, and diplomatic partnerships with Global South countries should consider the wider implications of U.S. green protectionism in their decision-making. Indeed, many of these states are frustrated with the inequitable application of international trade rules and are turning to alternative partners that are keen to engage in mutually beneficial deals. As such, without a change of strategy, the United States will continue to lose its legitimacy on the international stage and further contribute to China's success as a prominent economic partner for many in the Majority World.

⁴⁸ Glenn Kessler, "JD Vance's False Claim That 'Green Energy Scam' Ships Jobs to China," *Washington Post*, August 12, 2024, accessed November 20, 2024, <https://www.washingtonpost.com/politics/2024/08/12/jd-vances-false-claim-that-green-energy-scam-ships-jobs-china/>; Valerie Volcovici, "US Utilities Want Trump, Republicans to Save Inflation Act, Edison CEO Says," Reuters, November 21, 2024, accessed November 23, 2024, <https://www.reuters.com/world/us/us-utilities-want-trump-republicans-save-inflation-act-edison-ceo-says-2024-11-16/>.