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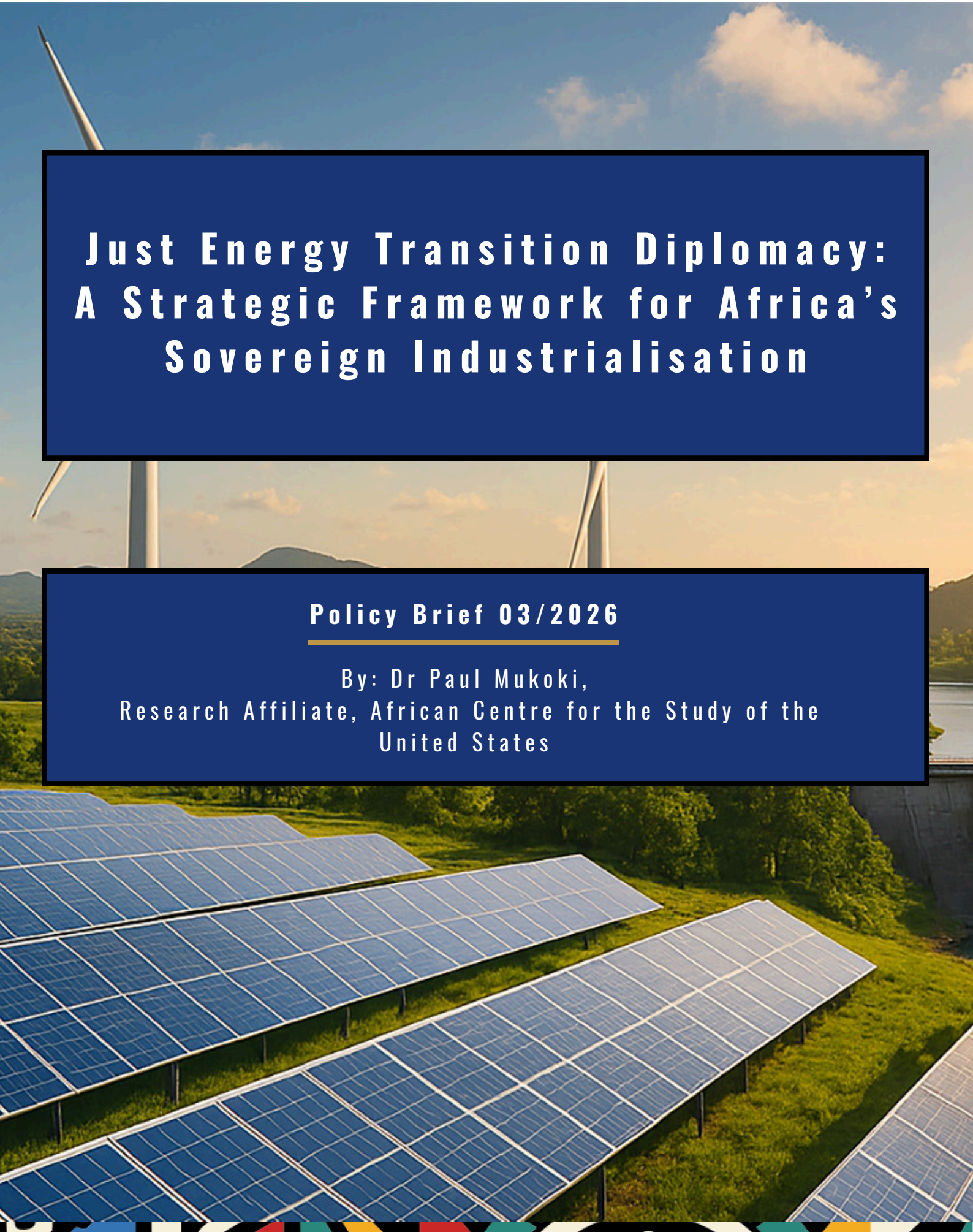

Just Energy Transition Diplomacy: A Strategic Framework for Africa's Sovereign Industrialisation

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Executive Summary

The global shift towards a low-carbon economy presents Africa with a paradox: the continent possesses the minerals vital for the world's green future, yet it remains the most energy-impoverished region on earth. As of 2026, over 563 million Africans lack electricity, and 940 million do not have access to clean cooking facilities, resulting in approximately 815,000 premature deaths each year from household air pollution. This paper contends that a "Just" transition must go beyond carbon mitigation to prioritise energy sovereignty and industrial beneficiation.

The core of this new diplomatic framework is the shift from "extractive enclaves" to Renewable Energy Corridors (RECs). By harnessing the substantial global demand for transition minerals, African nations can negotiate "Power-for-Processing" agreements that require investment in high-voltage, cross-border transmission networks. These corridors—such as the Southern-Central Hydro Link and the West-Coast Green Hydrogen Corridor—serve as the technical foundation for domestic value addition. Without enough stable and green power, Africa's mineral wealth will continue to be exported as raw ore, undermining the continent's capacity to tackle the triple challenges of poverty, unemployment, and inequality.

Aligned with the 2025 G20 Johannesburg Leaders' Declaration, this paper advocates for the creation of a Civil Society Special Envoy and a Technical Advisory Group (TAG) to standardise regional energy-mining codes and reduce the "African risk premium" for infrastructure finance. By prioritising energy sufficiency as the key development goal of mineral diplomacy, Africa can transition from simply supplying raw materials to becoming a sovereign co-creator of the global energy transition.

Introduction:

As the world shifts toward a low-carbon future, Africa stands at a crossroads where global power plays and local survival meet. In the boardrooms of the Global North, the transition to renewable energy is often discussed as a high-stakes race to hit carbon-neutrality targets. But for Africans, this "Just Energy Transition" is far more than a checklist of environmental obligations or a diplomatic talking point. It is a fight for the basic tools of modern life. This necessity will determine whether the continent can finally power its

own hospitals, light its own classrooms, and build an economy that serves its people rather than just exporting its wealth. To be truly “Just,” this transition must effectively address Africa’s long-standing challenges: chronic energy poverty, the export of raw materials, and health crises caused by outdated energy systems.

The Southern Africa Resource Watch (SARW) held a symposium in late March 2026 to promote a coordinated African approach to minerals diplomacy. It is a relevant and timely initiative. However, this diplomacy will be ineffective if it is not rooted in energy sufficiency. We must recognise that the global demand for "Critical Minerals" gives Africa unprecedented collective bargaining power. This paper contends that Africa’s diplomatic objective should be to trade access to these minerals for the substantial sovereign energy infrastructure necessary to support domestic industrialisation.

1. The Human Imperative: Quantifying the Cost of the Status Quo

A "people-centred" approach begins by recognising the staggering human cost of our current energy shortfall. As of early 2026, approximately 563 million Africans – mainly in rural and peri-urban areas – still lack access to basic electricity. This isn’t just about convenience; it’s a barrier to modern healthcare, education, and economic participation.

The disparity in access creates a "two-tier" Africa. While Northern Africa has achieved near-universal access (98%), Central Africa remains at a startling 28%. This geographical inequality is a key driver of migration and regional instability. Without a radical shift in diplomatic efforts to fund decentralised grids, the gap between the "energy-rich" and "energy-poor" will only widen as the global North secures its own green energy supply chains.

The situation with clean cooking is even more critical. More than 940 million Africans rely on polluting fuels such as wood, charcoal, and kerosene.[1] The results are deadly. Household air pollution is now a leading cause of death across the continent, responsible for an estimated 815,000 to 1.1 million premature deaths each year. In Sub-Saharan Africa, it is the third-largest risk factor for mortality in children under five, behind only malnutrition and water-related illnesses.

[1] This figure is expected to rise to 1,1 billion by 2050.

Region	Electricity Access Rate (%)	People Without Clean Cooking (Millions)
Northern Africa	98%	<10
Eastern Africa	55%	~250
Western Africa	60%	~300
Central Africa	28%	~180
Southern Africa	72%	~200
Source: Synthesised from IEA World Energy Outlook (2025) and AFREC Energy Progress Reports (2026).		

2. Energy Sufficiency: The Prerequisite for Beneficiation

The SARW mandate aims to transform Africa from merely a supplier of raw materials into a partner in the global transition. To achieve this, we must address the "beneficiation-energy paradox." Beneficiation – the domestic refining and processing of minerals – is a highly energy-intensive industrial activity. Currently, many African nations export raw lithium concentrate (spodumene) at a fraction of the price that refined lithium hydroxide commands on the world market.

To bridge this gap, the energy demands are significant. For example, the energy required to refine lithium or cobalt into battery-grade precursors is much higher than that for simple extraction. Although extraction accounts for about 30% of the environmental and energy footprint in traditional supply chains, the refining stage is the main driver of electricity consumption.

Historically, African energy infrastructure served what Ferguson (2005) and Rubbers (2019) call 'extractive enclaves', where railways and power grids were designed to transport raw materials to ports. To transition towards a beneficiation model, Africa needs a "Productive Access" strategy.[2] We must ensure that mining concessions include

[2] Productive Access: provision of energy for income-generating, value-adding activities rather than basic household consumption alone. https://documents1.worldbank.org/curated/en/099092023192023389/pdf/P1751521d3f58f6f1307c1499619e141b8baef6de8dd.pdf?

"Power-for-Processing"[3] clauses that require investors to install baseline power capacity to benefit both the industrial site and the surrounding community.

3. Technical Deep Dive: The Rise of Renewable Energy Corridors (RECs)

A key element of the proposed Continental Blueprint is the transition from fragmented national grids to Renewable Energy Corridors (RECs), also known as Clean Energy Corridors. These corridors consist of high-voltage cross-border transmission networks designed to connect regions rich in renewable energy potential with industrial mineral hubs. According to the World Bank (2023), the concept of productive access exemplifies this approach. At the local or village level, productive access involves supplying power to enterprises such as milling, irrigation, cold rooms, welding, retail, and digital services. On a regional industrial scale, the same principle applies to mineral beneficiation, smelting, refining, fabrication, and logistics hubs. In both contexts, the core idea is that energy access should be organised to support production rather than simply consumption.

For example:

A. The Southern-Central Link (The Cobalt-Copper Corridor)

The Democratic Republic of Congo (DRC) and Zambia hold the world's largest reserves of cobalt and copper, yet power shortages often limit their industrial output. Meanwhile, Ethiopia and Uganda have significant untapped hydroelectric potential. An REC linking the Grand Ethiopian Renaissance Dam (GERD) through the East African Power Pool to the Copperbelt would provide reliable, baseload green energy necessary for large-scale smelting and refining.

B. The Green Hydrogen West-Coast Corridor

Namibia and Mauritania are emerging as global leaders in Green Hydrogen. By developing a coastal REC, these countries can supply the zero-carbon heat needed for steel and manganese processing in neighbouring South Africa and Gabon. This "Green Steel"

[3] A proposed concession clause requiring investors to install power capacity for mineral processing and, where feasible, for surrounding communities. https://www.gov.za/sites/default/files/gcis_document/202505/critical-minerals-and-metals-strategy-south-africa-2025.pdf?

initiative would allow African products to avoid carbon border adjustment taxes (such as the EU's Carbon Border Adjustment Mechanism (CBAM))[4], ensuring African industrial goods remain competitive in a decarbonising global market.

C. Technical Standardisation and Harmonisation

For these corridors to function effectively, Just Energy Transition Diplomacy must focus on technical harmonisation. This includes:

- **Grid balancing:** Using AI-powered load balancing to integrate intermittent solar and wind with baseload hydro.
- **Unified Wheeling Agreements:** Developing a legal framework that allows a solar farm in Botswana to "wheel" power through the South African grid to a refinery in Zimbabwe without excessive transit fees.

4. Diplomacy and the G20 Legacy: Moving from Billions to Trillions

The 2025 G20 Summit in Johannesburg signalled a shift in global rhetoric. The "Global New Energy Investment Pact for Africa" and the "Ten-Year Africa Energy Infrastructure Investment Plan" recognised that Africa's transition is distinct. However, African diplomacy must advance beyond the "pledge" stage.

Just energy transition diplomacy should prioritise reform of the financial architecture. African nations currently face borrowing costs for green infrastructure that are up to eight times higher than those in Europe or North America. This "African risk premium" acts as a tax on the transition. Diplomacy must focus on:

- **Sovereign Guarantee Pools:** Establishing a multilateral fund to guarantee local currency loans for energy projects.
- **A Sovereign Guarantee Pool** is a multilateral fund – backed by the African Development Bank (AfDB), G20 partners, and African Sovereign Wealth

[4] **Carbon Border Adjustment Mechanism (CBAM):** The European Union's carbon-pricing policy applies to specific imported goods, including steel, aluminium, cement, fertilisers, electricity, and hydrogen. This policy requires importers to pay a carbon price equivalent to the EU Emissions Trading System price for products produced in jurisdictions with less stringent climate regulations. (European Commission, 2023).

Funds – that provides "credit enhancement." It essentially acts as a co-signer for energy projects.

- **How it works:** If a local bank lends to a solar refinery project in Zambian Kwacha, the Guarantee Pool commits to cover a portion of the loss if the borrower defaults. This "de-risks" the investment, encouraging local pension funds and commercial banks to lend at lower interest rates and longer tenures.
- **Example (2025/2026 context):** The **Zafiri Investment Facility**, launched in 2025 with an initial **$300 million**, employs this model to mobilise up to $1 billion in equity and debt for renewable projects by providing anchor guarantees that satisfy conservative institutional investors.

2. **Debt-for-Climate Swaps:** Using the G20's backing to turn high-interest debt into investments for the RECs mentioned above. For example, according to UNCTAD (2023), African nations as of 2022 held a collective debt of around $1.8 trillion, with annual service payments reaching $74 billion in 2024. This capital, which could be used for industrialisation, is instead flowing out of the continent to settle old loans.

   Diplomatic Focus: Following the 2025 G20 Johannesburg Summit, a new global mandate has arisen to integrate "Climate-Resilient Debt Clauses" into restructuring procedures. A Debt-for-Climate Swap enables a portion of a country's foreign debt to be either "forgiven" or "restructured" on the condition that the funds saved are directly invested in pre-approved green projects.

   - **How it works with RECs:** Instead of a mineral-rich nation paying $100 million in interest to a bilateral creditor, that creditor agrees to redirect those funds into the construction of a Renewable Energy Corridor (similar to the Southern African Power Pool's new energy storage strategy). This improves the country's debt sustainability while also building the infrastructure needed for mineral beneficiation.
   - **Illustration:** Envision the DRC redirecting debt interest into the Grand Ethiopian Renaissance Dam (GERD) transmission link. This swap

transforms a financial "dead weight" into a productive asset, enabling the DRC to refine its cobalt using clean hydro-power.

5. The Role of Critical Minerals in Beneficiation

The demand for Africa's minerals boosts the continent's collective bargaining power, a strength not seen since the decolonisation era. Access to lithium, manganese, and graphite should be tied to technology transfer and domestic content requirements. We need to move from "dig and ship" to "process and manufacture." By establishing mineral processing in energy-rich regions, Africa can develop a comprehensive battery value chain. This is the only way to ensure the energy transition addresses the triple challenges of poverty, unemployment, and inequality.

6. Institutional Architecture: The Civil Society Envoy and TAG

Establishing a Civil Society Special Envoy and a Technical Advisory Group (TAG) is a vital institutional innovation. This framework will ensure that the "Just" aspect of transition remains centred on people.

Key Roles of the TAG:

- **Mineral-Energy Synergy Audit:** Assessing the specific energy needs of each mineral-producing region to prioritise infrastructure investment is essential. This involves conducting comprehensive technical assessments of the individual kilowatt-hour requirements for refining various minerals within each region. By mapping these power demands against local renewable potential, the TAG enables governments to prioritise high-impact infrastructure spending that directly supports industrial value-added activities and reduces transmission losses.
- **Environmental Oversight:** Ensuring that the rush for "green" minerals does not lead to "brown" environmental damage or human rights violations in mining communities. The TAG acts as a vital watchdog to guarantee that the global pursuit of "green" transition minerals does not result in "brown" ecological harm. This involves strict oversight of groundwater contamination, tailings management,

and protection against human rights abuses, ensuring that African communities benefit from a genuinely sustainable and ethical extraction process.

- **Strategic Bargaining:** Supplying producer nations with the data necessary to negotiate fair "Power-for-Resource" agreements. This role focuses on equipping African producer nations with real-time market intelligence and cost-benefit data to address information asymmetry during negotiations. By providing empirical evidence of a mineral's worth, the TAG enables states to demand "Power-for-Resource" agreements that require investors to establish permanent, shared energy infrastructure for the host nation.

Conclusion

The path to a sovereign African future is lined with transmission lines and refining plants. Just Energy Transition Diplomacy is the tool we must employ to forge that path. By aligning our mineral wealth with our energy needs through Renewable Energy Corridors, we can move beyond the "extractive enclave" model towards an inclusive, industrial economy.

Africa must speak with one voice in international negotiations, asserting that the global energy transition will not come at the expense of African development. Instead, the transition must be the vehicle that finally brings electricity to every African home and powers the factories that will define our future.