China building new financial architecture for clean energy tech

It may come with conditions

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OPINION

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In the wake of the latest fossil fuel price shock, finance officials in developing countries are scrambling to contain the fallout, which includes the ballooning costs of fuel subsidies, rising food prices, shortages and queues, foreign exchange pressures, and higher borrowing costs. Few countries are being spared. South Africa faces inflation, Indonesia estimates an additional $5.9 billion in energy subsidies, Vietnam's growth slows, and Senegal has banned nonessential government travel.

From the perspective of a typical finance minister in the Global South, the energy transition now appears more a question of direct, national self-interest than an act of planetary benevolence. Electrification, once primarily a decarbonization strategy, is now sovereign-risk management. Every increasingly cheap solar park, battery storage system, and electric bus fleet promises more than lower emissions: It promises less exposure to geopolitical shocks via fewer imported barrels, fewer dollar invoices, and fewer subsidy crises.

In this piece, I sketch out the emerging policy options available to Global South policymakers who want to finance their energy transition, which is now more urgent than ever. Whereas Western offers have proven insufficient, China's offer has distinct advantages. It combines access to some of the cheapest finance in the world with access to clean energy technology hardware, all increasingly packaged through exclusive, digital, smart contracts. Emerging markets should take advantage of this opportunity — to plan and develop onshore and offshore electrotech supply and value chains, in pursuit of genuine energy sovereignty — and they would be well advised to do so with eyes wide open and with a full understanding of the long-term implications. Oil has many sellers; clean energy technology is currently a very small club — of one.

The Western and Chinese offers

Currently, the official Western offer to help developing countries transition to clean energy is incomplete. The Just Energy Transition Partnerships (JETPs) — blended, G7-led, public-private vehicles combining concessional loans, minimal grants (under 5 percent of an overall project) and strict conditionalities — were meant to show that the G7 and partners could mobilize serious finance for coal-dependent and transition-exposed economies. South Africa, Indonesia, Vietnam, and Senegal became the poster children. But the JETP model has struggled to become a sovereign-scale, industrial-financial proposition. It is fragmented across donors, development banks, guarantees, private capital hopes, grants, loans, and technical assistance. The packages are complex, uneven, and insufficient against the scale of transition needs.

The average Global South finance minister is not choosing between a perfect Western offer and a dangerous Chinese one. Other actors are in the wings — such as Persian Gulf sovereign vehicles like Masdar, a UAE state-owned clean energy company; Japan's Tokyo International Conference on African Development, with renewed commitments through the Japan Bank for International Cooperation; and regional development banks. Through these mechanisms, an increasing interest in South-South investors can now be seen. Furthermore, Western multilaterals have broadened their menu beyond JETPs: the European Investment Bank's Global Gateway instruments and the World Bank's Climate Investment Funds offer genuine concessional pathways, but they typically arrive with conditionality and procurement rules, such as mandatory alignment with EU environmental standards and supplier eligibility limitations. These rules add to the complexity of a choice that finance ministers must make between what is readily available when their budgets are under stress. Policy and legal advice — via grant-financed technical assistance, equipment procurement standards, foreign technical specifications, and donor coordination — all have value, but none of them buys buses, batteries, solar modules, or, most importantly, time. And no Western instrument yet combines the scale, speed, scope, and sovereign flexibility that defines the China offer at its best. Where the Western menu offers a plethora of ingredients and new flavorings, the Chinese one offers the meal — ready-made and warm.

The first Chinese advantage is cheap finance. In April 2022, a measure known as the 10-year sovereign yield spread between US and Chinese government bonds became positive, meaning that China can raise domestic capital more inexpensively than the United States can. As sovereign lending sets the floor for all downstream lending, Chinese policy banks can extend loans to the Global South at rates Western institutions cannot match (see figure 1). Sovereign 10-year yields determine domestic borrowing costs for mortgages, car loans, and infrastructure project finance. By April 30, 2026, the US 10-year yield stood at 4.39 percent and China's 10-year yield at 1.75 percent: a 264-basis-point gap. Critically, the spread has remained above 200 basis points for 18 consecutive months, from November 2024 to April 2026, costing a borrower more than $20 million in additional annual financing for every billion dollars raised at US rather than Chinese rates. In May, the spread widened further as US 30-year yields rose to highs not seen since 2007.

Climate finance is increasingly a cost-of-capital contest: Financing costs make up a large share of renewable projects, for example, a wind power project that does not face fuel costs. Physical equipment requires financial capital long before it will deliver any fiscal relief. Fortuitously, China can now transmit that lower cost of sovereign capital in the form of cheap financing through its policy banks, export-credit structures, renminbi (RMB) corridors, and state-directed industrial finance operations at the exact moment energy-importing sovereigns need to fund electrification. In contrast, currently the dollar system prices emerging-market risk expensively, and multilateral or G7 finance arrives slowly or only partially. So, a lower-cost Chinese finance becomes attractive for emerging markets on a pure cost basis, quite apart from any ideological considerations related to closer ties to China versus the United States. The spreadsheet speaks first.

Furthermore, the differences between the Chinese and US costs of capital may prove durable due to China's declining working-age demographics and large private-sector debts. China is aging more than twice as fast as the United States, and aging populations are associated with depressed interest rates. Any market-driven rise in Chinese bond yields will be slow, and, most probably, slower than the United States, comparable to the experience of Japan. These deflationary dynamics — demographic in origin, structural in character, and repeatedly confirmed in the data — make a sustained rise in Chinese bond yields unlikely for the remainder of this decade, and with it, the cost of capital advantage durable. The

Figure 1. Chinese Capital Is Significantly Cheaper than U.S. Capital

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World Economic Forum's June 2026 economic analysis confirms continued weakness in the Chinese economy, with consumer price index (CPI) inflation at 1.2 percent, below the government's 2 percent target, and a housing market that has yet to find its floor.

Demographics, however, are only part of the story. China also suppresses its borrowing costs through mandates that direct state banks to hold government debt at administered rates and that maintain capital controls, trapping domestic savings inside a system that generates negative real returns for households, who have few alternatives. The result is a cost of capital that is partly a market outcome and partly a policy artifact.

Already, the rate gap is changing sovereign debt strategy for capital-intensive renewables. Kenya converted $3.5 billion in dollar-denominated loans that were pegged to the US market rate into RMB-denominated loans with a fixed interest rate of 3 percent, reportedly saving the government more than $200 million a year. This is the yield spread alone. Ethiopia started similar conversations with China in October 2025 and is still negotiating in April 2026. Both countries' renegotiations show that the sovereign conversation is shifting from who lends to which currency carries the transition balance sheet.

China's second advantage is that it can also finance what it manufactures — electrotech. China continues to dominate the core clean-technology supply chains. In solar panel manufacturing, its share of the supply chain exceeds 80 percent across polysilicon, ingots, wafers, cells, and modules, and was projected to approach almost 95 percent in polysilicon, ingots, and wafers through 2025. In 2024, China installed up to 357.3 gigawatts of solar photovoltaic capacity, nearly 60 percent of global additions, underscoring the scale behind that dominance. In electric vehicles, China was responsible for nearly 80 percent of battery cell production in 2024.

China's monthly electrotech export data — compiled at Ember, a UK-based clean energy think tank — tells the story better than any policy document (see figure 2). Monthly exports of solar panels, batteries, electric vehicles, grid equipment, wind turbines, and heating and cooling systems averaged $15–16 billion across 2024, then surged to a full-year total of $223 billion in 2025 — a 21 percent jump in a single year. March 2026 alone hit $25.8 billion, a record driven by accelerated purchases due to the Strait of Hormuz shipping tensions and a rush to beat an expiring export tax credit. Behind every shipment sits a financing arrangement: project facility, export credit, or trade finance drawn against the importing country's own receivables. The question for developing-country policymakers buying growing volumes of electrotech is not whether this trade is financed,