Giving a Green Light to the Global South:

How International Chaos Puts Developing Countries at the Forefront of Climate Initiatives

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The twin threats to global economic stability of Russia’s invasion of Ukraine and President Donald Trump’s anti-green policies are likely to slow the renewable energy transition in rich, industrialized countries. Europe’s desire for energy security and rearmament in the face of Russian aggression and wavering support from the United States has redirected the attention of the traditionally environmentally inclined European parties away from energy and towards more pressing, existential concerns. The U.S. remains one of the largest carbon producers globally and the Trump Administration’s cuts to environmental protections and green energy credits are likely to stymie domestic efforts to reduce emissions. While the advanced economies have largely abandoned efforts to lead a global transition to green energy, the international instability that they currently face may accelerate renewable adoption in the Global South. Contrary to traditional theories of global change in international relations, a combination of existing policies—particularly China’s investment in renewable technologies—and pressure from trade competition is likely to enhance the green energy transition in developing countries.

Why IR predicts a slowing of green growth

The collapse of rich countries’ dedication to climate-friendly policies due to anti-climate politics (US), security concerns (United Kingdom and European Union [EU]), and strategic energy assets (Gulf states and Russia) portends an unraveling of progress in the green energy transition. While the epistemic consensus on the origins and costs of climate change is unchanged, powerful states have chosen to focus on other priorities. The lack of cohesion among these states about the importance of combating climate change dampens international pressure to transition and limit emissions. If climate change represents a Prisoner’s Dilemma, the advanced economies have failed to resolve the strategic problems inhibiting international cooperation on the issue.[[1]](#footnote-1)

At the same time, global economic uncertainty changes the viability of existing investments in renewable energy. By dismantling the Inflation Reduction Act (IRA), the Trump Administration and the US Congress has limited the incentives for Americans and US companies to adopt green technology. Trump’s political base calls for a return to fossil fuel use, including opening national parks, oceans, and deep seas for mining and drilling. While the IRA spurred investment in electric vehicle technology, battery manufacturing, and solar installation, the rapid repeals of the tax incentives included in that legislation, combined with uncertainty about tariff rates, leave businesses with no clear path for future investments in the US or overseas. Together with an uncertain policy environment stemming from a slowing global economy, the US’s open hostility to renewable energy will disincentivize companies from embracing green technology.

Europe’s dedication to addressing climate change has not wavered in name, but fiscal support is lacking. The Russian invasion of Ukraine has diverted attention and resources towards security and rearmament.[[2]](#footnote-2) While Europe sought to limit its dependence on Russian oil and gas in the wake of the invasion, states such as Germany have locked themselves into contracts with alternative fossil fuel producers to solve short-term energy needs rather than scale up renewable investments. As in the US, climate change has become a wedge issue in Europe. The political polarization associated with a green transition has placed conservative, right-wing parties on the side of abandoning climate-friendly efforts.[[3]](#footnote-3)

The exponential growth in demand for energy from artificial intelligence (AI) and cryptocurrency mining in the US, Europe, and China has the potential to either speed renewable adoption or tether rich countries to fossil fuels in order to meet immediate energy needs.[[4]](#footnote-4) Data centers run by powerful corporations accounted for up to 2 percent of global energy consumption in early 2025 and this amount is only expected to grow over time.[[5]](#footnote-5) Incentives for AI companies that are more reliant on clean energy to lobby for stricter emissions regulations in order to starve out fossil fuel-reliant competitors are strong,[[6]](#footnote-6) but the impetus for immediate energy to meet AI demand may be stronger, precipitating even higher emissions on the part of advanced industrial countries.

While these changes risk reversing progress on emissions in the Global North, of greater concern is the rising demand for energy in the Global South. Although the US, China, and Europe remain the highest emitters, the vast majority of demand for energy increases in the future is expected to come from the Global South. According to the International Energy Agency, China, India, and countries in Southeast Asia have been the primary drivers of the growth in energy demand over the last five years.[[7]](#footnote-7) Setting aside economic growth, Africa alone is expected to experience population growth of about 80 percent in the next three decades.[[8]](#footnote-8) More broadly, economic development hinges on access to energy. As the Energy for Growth Hub makes clear, high-income, low-energy countries do not exist. Economic growth in the Global South will be accompanied by, and dependent on, access to energy.

For the Global South, the lack of international cooperation and funding for alternative energy sources would seem to close off the road to green energy. Indeed, the US has withdrawn its promised funds for Just Energy Transition Partnerships—aimed at helping coal-dependent middle-income countries transition to more sustainable energy—in South Africa, Indonesia, and Vietnam. The wholesale cancellation of millions of dollars in US aid, combined with the shuttering of the United States Agency for International Development, further undermines developing countries’ ability to invest in renewable sources—by both halting progress on existing renewable energy initiatives and shrinking the resources available for recipient countries. While European donors have not stepped in to fill the gaps left by US funding, China has done so,[[9]](#footnote-9) and with less concern for the environmental consequences of its programming.[[10]](#footnote-10) Thus, any dynamics of the green energy transition is unlikely to be driven by a supply-side effect from the Global North.

But this analysis ignores key dynamics specific to the Global South

Existing theories of the politics of the global energy transition focus on collective action problems, domestic distributional effects, and interest groups. However, these models seek to explain political action in advanced rich industrialized countries, especially those in the EU and the US.[[11]](#footnote-11) Historical industrialization patterns in Western countries have been spatially concentrated—and the cost of deindustrialization has led to right-wing backlash in those same communities, many of whom hold disproportionate political power.[[12]](#footnote-12) The spatial impacts of the energy transition in rich, industrialized countries undermine incentives for renewable investment. When countries with the economic means to orchestrate an energy transition for their fossil fuel communities are unable to overcome the political obstacles to doing so, one might imagine that developing countries—which are characterized by a scarcity of capital—are even more vulnerable to a slowdown in adopting renewables from a political economy standpoint.[[13]](#footnote-13)

Yet, the available evidence suggests that developing countries are actually *increasing* the rate of transition from fossil fuels to renewables.[[14]](#footnote-14) Current estimates are that the Global South is adopting renewables at twice the rate as the Global North.[[15]](#footnote-15) Three factors are likely to continue to push the energy transition forward in developing countries: (1) falling renewable prices, (2) global economic instability, and (3) China’s increasing economic capacity.

The most significant driver of renewable adoption in the Global South is the decreasing cost of solar and wind energy. The price of solar panels has fallen from $100 per watt to less than 50 cents per watt in the last fifty years, and there are few signs of this reduction abating.[[16]](#footnote-16) Drops in the price of renewable energy compared to fossil fuel sources alter the economic calculation of developing countries as they industrialize and electrify.[[17]](#footnote-17) Demand for power in the Global South is projected to skyrocket as populations grow and industries develop. When the economic calculation for investing in new power sources favors renewables, countries that lack fossil fuel infrastructure are likely to transition quickly to green energy sources.

To date, trends in renewable investment have primarily reflected falling solar and wind energy costs due to China’s leaps in manufacturing efficiency.[[18]](#footnote-18) China’s strategic investments in renewable energy manufacturing stem from state policies aimed at transitioning its economy to a more high-skilled labor force, particularly in the face of the economic slowdown it has experienced in the last several years.[[19]](#footnote-19) China’s absence of a domestic oil industry, and the growing health and economic effects of coal pollution on its population, helped clear a political path for green industrial policy.[[20]](#footnote-20) The centralized authoritarian regime also increased the state’s ability to support renewable technology that might otherwise have faced strong domestic opposition.[[21]](#footnote-21)

American and European investment in domestic renewable capacity—which has been explicitly an attempt to reduce green technology dependence on China—also reduced China’s reliance on these export markets over the last five years. US tariffs are unlikely to affect China’s renewable sector: only 4 percent of Chinese renewable exports are to the US.[[22]](#footnote-22) In recent years, over 70 percent of these renewable exports has been purchased by countries in the Global South.[[23]](#footnote-23) China’s continued overproduction of solar panels makes these export markets even more important as trade with other industrialized countries contracts.[[24]](#footnote-24) As the Trump administration continues to threaten or to actually place tariffs on nearly all of its trade partners, buyers of green products like solar panels will be driven into the arms of Chinese exporters, helping to reinforce China’s presence in the Global South’s market for renewables.

China’s dominance in manufacturing for renewables extends to the critical mineral inputs for green technology.[[25]](#footnote-25) As demand for technology made with nickel, cobalt, lithium, and rare earths increases with technological progress in AI, semiconductors, and batteries, Chinese geopolitical influence also grows.[[26]](#footnote-26) Weaponizing its control of the crucial mineral supply chain, China has a vested interest in encouraging adoption of renewables, as well as increasing its command of mines and natural resource contracts, in the Global South. [[27]](#footnote-27)

On the demand side, the political calculations of the green energy transition in the Global South are vastly different compared to the Global North. The instability of global economic relations only serves to reinforce the political distinction. Political leaders in developing countries have opportunities to expand or reinforce their political advantages through electrification as a source of patronage.[[28]](#footnote-28) Solar microgrids and other electrification initiatives that bypass the need for central government involvement introduce new political dynamics in development. The potential for renewables to disrupt governments’ expansion of control and influence in electrifying areas rarely exists in the Global North, which has largely electrified and retains strong state capacity. The potential for non-state actors to invest in their own energy supplies by adopting renewable technology also offers a route to electrification and industrialization that is less dependent on state action. Low rates of initial electrification result in less institutionalized fossil fuel power, which renders the green energy transition politically fraught in advanced economies. While several middle-income and low-income countries have robust fossil fuel sectors (primarily aimed at export markets), the phenomenon of “carbon lock-in”—in which vested fossil fuel interests resist the energy transition due to the long lifespans and cost of decommissioning carbon-intensive assets—is absent in much of the developing world.[[29]](#footnote-29) Even developments such as global demand for generative AI may differently shape the developing world, where the lowest-cost energy option to power new data centers is likely to be renewable energy.

While the falling solar and wind prices fundamentally change the economic calculus for renewable adoption in developing states–encouraging a green transition in the Global South—fluctuations in global commodity markets may increase the costs of relying on fossil fuels in the near term, thereby prompting the developing world the eschew carbon. The chaos of global markets currently makes new investment in fossil fuel generation particularly risky. Fluctuations in prices for fossil fuel commodities promise to affect consumers and producers of oil, coal, and gas alike. Commodity markets are difficult to predict in normal times and the high upfront costs of coal, oil, and gas production may not pay off for years, if ever. Investing in fossil fuels is more economically risky for developing countries. As China increases its domestic renewable capacity, the state’s demand for coal imports has fallen. Increasing trade tensions with the US, a primary coal exporter to China, also decreases the likelihood that China’s coal appetite will return.[[30]](#footnote-30) Oil volatility responding to tariffs, sanctions on Russia and Iran, and uncertainty around OPEC production quotas is disrupting markets for both oil consumers and producers.[[31]](#footnote-31) Natural gas may be an exception to this trend, as both Europe and China have invested substantially in liquid natural gas pipelines across the African continent, but many pipelines remain under construction despite years of investment, hampering developing states’ ability to profit from these natural resources.[[32]](#footnote-32) If renewable energy continues to drop in price, fueling adoption in low-income countries, the market for fossil fuels will further shrink.

If there is a region in the Global South with carbon lock-in, it is the Persian Gulf of the Middle East. Yet, it is notable that even Gulf states, which are highly dependent on the carbon-based economy, have also accelerated their adaptation to green energy. Some of these efforts are driven by global dynamics around climate. For example, Saudi Arabia, the United Arab Emirates, and Oman have each agreed to net carbon-zero targets within the next two decades as a part of ongoing international climate negotiations. The reality of climate change, however, also plays a crucial role. Record high temperatures have hit Gulf states in recent years. The majority of electricity demand in the Gulf originates from air conditioning systems.[[33]](#footnote-33) Saudi Arabia currently imports more solar panels from China than any other single country.[[34]](#footnote-34) Even as the Gulf States use OPEC to manage prices, uncertainty about future oil markets is likely to undermine their global power.

What does this all mean?

After decades of episodic progress in mitigating climate change, there is currently a distinct possibility that such advances will ebb and many earlier accomplishments could be reversed. Donald Trump (again) withdrew from the Paris Agreement on the first day of his second term as president of the United States. Over the course of his first 100 days in office, he then proceeded to take 145 actions that rolled back existing rules and regulations and otherwise threatened environmental safety, more than during his entire first term.[[35]](#footnote-35) Other leading countries seem unlikely to assume the mantle of green leadership. Members of the EU do seem committed to addressing climate change and environmental safety. However, the geopolitical threat posed by Russia and the need to bolster European security has understandably distracted both attention and resources from this commitment. Equally, the gains throughout Europe of far-right populist parties that share Trump’s hostility to attenuating climate change could quickly undermine this commitment altogether. China has an economic incentive to press for the spread of green initiatives, but has not yet taken a leadership position on the global stage.

In light of these issues, much of international relations theory would predict that little progress will be made in the arena of climate change over the foreseeable future. The current international system seems to be marked by the absence of a hegemon, especially one with an interest in leading global efforts to bolster the environment. There is, of course, a tradition of international relations research associated with international organizations and regimes that offers a more optimistic prognosis. For example, various studies have argued that epistemic communities can help to identify and resolve environmental problems.[[36]](#footnote-36) Equally, recent research has advanced the possibility that “climate clubs” could help to resolve the free riding that has hampered efforts to address climate change.[[37]](#footnote-37) However, this vein of research has not addressed the problems of accountability, transparency, and setting standards and goals—not to mention conflicting interest among countries—that have repeatedly limited the effectiveness of the climate regime. Moreover, without leadership by a single state or a small group of major powers that cooperate and agree on climate goals, it is difficult to imagine how the regime will function.

The problems seem all the more vexing when turning our attention from the Global North to the Global South. Existing studies typically characterize the latter as pollution havens, which often engage in regulatory races to the bottom in order to attract overseas investment and promote economic development. As they develop, they pollute in keeping with the Environmental Kuznets Curve.

Nonetheless, we have argued that the Global South may unexpectedly embrace green energy and climate change mitigation in the coming years, perhaps much more warmly than the Global North. The key reason is the economic incentives faced by developing countries. Renewable energy is becoming increasingly more efficient and less costly than traditional energy sources, such as petroleum and natural gas. At the same time, the development agencies on which these countries rely—especially the International Monetary Fund and the World Bank—are actively promoting green development. Furthermore, while China is an unlikely candidate to lead the climate regime, it is the leading manufacturer of solar panels. The export of these panels and other clean energy technologies throughout the Global South have been key parts of China’s massive Belt and Road Initiative.

To be sure, green solutions in the Global South will encounter headwinds. It does not take a sophisticated understanding of political economy to recognize that rent-seeking by predatory government officials and interest group politics could easily undermine green development. Even if it succeeds, green development in the Global South is likely to be accompanied by at least a certain amount of cronyism. But crony green outcomes are preferable to those that fail to mitigate climate change. Though this issue has not been addressed adequately to date, the strongest push for green solutions could stem from the developing countries that have traditionally been considered among their fiercest foes.

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