PIIE PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS

WORKING PAPER

25-17 Global Economic Governance and the Fight against Climate Change

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July 2025

ABSTRACT

The institutions of global economic governance—the World Trade Organization, the International Monetary Fund, and the World Bank Group—face unprecedented challenges at a time when global efforts to mitigate and adapt to climate change are faltering. Rising economic nationalism, resurgent great power competition, and climate-skeptic populism in high-income democracies are undermining the ability of these institutions to coordinate around climate solutions. Facing these pressures, regional and plurilateral arrangements will be increasingly important for providing paths forward. This paper explores the concept of "tied aid" as a means of meeting the global South's need for large transfers in a context of increasing economic nationalism. It also highlights the pivotal role of countries other than the United States and China in sustaining and reforming global governance in a multipolar world. Although not first-best solutions, these approaches may be the most politically feasible strategies for advancing global climate mitigation, adaptation, and finance in the near future.

JEL Classifications: F53, Q54, F51, O19
Keywords: Climate Change, Economic Nationalism, Climate Finance, Plurilateralism, Geoeconomics, Energy

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Note: Version of the chapter originally published in Spanish and written for El Club Español de la Energía's publication "Energy and Geostrategy 2025." Republished in English with permission.

The author thanks Olivier Blanchard, Kimberly Clausing, Ana Belén Padilla, and Alan Wolff for comments on earlier drafts.

INTRODUCTION

The fight to mitigate climate change is at a crossroads. Buoyed by major economies' industrial policies, renewable energy installations surged in the past two years—and even faster deployment is anticipated in the next five (IEA 2024). The world's largest greenhouse gas (GHG) emitter, China, has deployed solar and wind energy at a shocking pace and driven down production costs for key renewable technologies. The second-largest GHG emitter, the United States, is experiencing a massive green energy manufacturing boom, catalyzed by the Infrastructure, Investment and Jobs and Inflation Reduction Acts. Prices have come down for critical minerals such as lithium, nickel, and graphite, which underpin the storage of renewable energy and the production of electric vehicles (EVs), reducing production costs. In 2023, emissions in high-income economies fell to their lowest point since 1973, despite being three times larger than they had been 50 years earlier. The European Union, via its Carbon Border Adjustment Mechanism (CBAM) and Corporate Sustainability Due Diligence Directive (CS3D), is attempting to catalyze—some might say impose—a more global approach to carbon taxation, climate mitigation, and sustainable supply chain practices.

At the same time, dissatisfaction with the institutions that govern the global economy is reaching a breaking point. The same industrial policies that have promoted the deployment of renewable energy are being driven by protectionism and economic nationalism in both high-income and developing (low- and middle-income) economies, reflecting the political and fiscal tradeoffs inherent in green transitions (Pisani-Ferry and Posen 2024). High-income economies, especially the United States, are subsidizing domestic production and using or threatening to use a variety of tools, including tariffs against free trade agreement partners, domestic content requirements, and increased use of national security exemptions. Developing economies are adopting economically nationalist policies of their own, particularly export restrictions and outright bans on unrefined critical minerals that are key to energy transitions. These countries are seeking to follow Indonesia's example by forcing the downstreaming of their extractive sectors into higher-value-added refined products.

The World Trade Organization (WTO) and the UN Framework Convention on Climate Change (UNFCCC)—institutions birthed in the decade immediately following the collapse of the Soviet Union and end of the Cold War—are in danger of becoming moribund. The Doha Round of WTO negotiations (2001–present) has delivered only minimal results, and the WTO's dispute settlement system, designed to prevent trade wars, has been unable to operate as intended since December 2019. Since the Paris Agreement of 2015, the UNFCCC's Congresses of Parties (COPs) have made only incremental gains in outlining processes and procedures for assessing progress toward Paris Agreement emissions reduction commitments. Although COP29 made progress on sorely needed climate finance for developing countries—with a tripling of the annual commitment from $100 to $300 billion by 2035—financing still falls short of the assessed need.

The need is staggering. The second *Needs Determination Report* by the UNFCCC identifies a cumulative financing gap of $5.0–$6.9 trillion by 2030 to

meet developing countries' Nationally Determined Contributions[1] (Standing Committee on Finance 2024). In 2022, members of the Organisation for Economic Co-operation and Development (OECD) finally surpassed the $100 billion mark in climate finance and agreed to triple that commitment at COP29.[2] The increase is still an order of magnitude smaller than the assessed need just to 2030, however—and these estimates likely understate the combined need not just for finance but also for technology development and transfer and capacity building (Pandey et al. 2022). Developing country ire is palpable: Chandni Raina, a member of India's negotiating team at COP29, called the outcome a "travesty of justice."[3]

This dissatisfaction extends to high-income economies and the electoral arena as well. In 2024, elections went dreadfully for incumbent parties in high-income economies, including the United States, where Donald J. Trump and congressional Republicans won a unified government. President Trump once again withdrew the United States from the Paris Agreement, even over the reservations of key US allies such as Israel and major Western oil companies such as Exxon and Shell, which are concerned by the apparent lack of US policy stability.[4]

Climate-skeptic rightist parties also made significant gains in Austria and in the European Union's two largest economies, France and Germany. High-income economies are experiencing a wave of anti-climate populism that will threaten future climate action and bodes ill for the large global North–South transfers needed to meet mitigation and adaptation targets, to say nothing of climate mitigation and adaptation in their own jurisdictions (Campanella and Lawrence 2024; Gourinchas, Schwerhoff, and Spilimbergo 2024). One can add to this combustible mix the return of great power competition, marked by US–China semiconductor and green tech rivalry, wider trade wars and Russia's invasion of Ukraine.

As the global institutions of economic and climate governance face strong headwinds, plurilateral or club-based approaches to economic governance and climate mitigation provide avenues for progress. The European Union, regional trading blocs like the Regional Comprehensive Economic Partnership (RCEP) in the Asia-Pacific region, cross-regional affinity groups like the BRICS and regional development banks are playing increasingly important roles in economic governance.[5]

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1 Nationally Determined Contributions (NDCs) are climate action plans submitted by individual countries under the Paris Agreement, establishing their targets for reducing greenhouse gas emissions and adapting to climate change.

2 OECD, "Developed Countries Materially Surpassed Their USD 100 Billion Climate Finance Commitment in 2022," Press release, May 29, 2024, https://www.oecd.org/en/about/news/press-releases/2024/05/developed-countries-materially-surpassed-their-usd-100-billion-climate-finance-commitment-in-2022-oecd.html.

3 Dharna Noor and Damian Carrington, "COP29 Climate Finance Deal Criticised as 'Travesty of Justice' and 'StageManaged,'" *The Guardian*, November 24, 2024.

4 Karl Mathiesen, "Israel to Trump: It Would Be 'Better' to Stay in the Paris Agreement," *Politico Europe*, November 14, 2024; Aubrie Spady, "Big Oil Breaks with Trump on Potential Second Withdrawal from Paris Climate Agreement," *Fox News*, November 14, 2024.

5 The BRICS is an intergovernmental organization that now includes 10 countries: Brazil, Russia, India, China, South Africa, Egypt, Ethiopia, Indonesia, Iran, and the United Arab Emirates. The goal of the organization is to increase South-South collaboration and reduce dependence on the US dollar.

This working paper examines the geopolitical and economic forces undermining the functioning of and faith in these global institutions and assesses the prospects for regional approaches to drive climate mitigation and finance. It assesses the prospects for a re-embrace of tied aid, including tied climate finance, by major Western donors. In particular, it points to the role countries other than the United States and China, the world's largest economies and GHG emitters, in reinvigorating global governance institutions. Failing re-engagement by major economies, regional approaches will not be a first-best solution, but they may be the only politically feasible way to make additional progress during an era of anti-globalist sentiment and increasing geoeconomic fragmentation.

Two Multilateral Moments

The architecture of global economic governance owes much to two periods of institution building separated by 50 years: the aftermath of World War II and the Cold War. The Bretton Woods institutions—the World Bank and the IMF—were established in 1944 to help rebuild war-torn economies and address balance-of-payment crises and issues of debt sustainability, respectively.[6] In 1947, the General Agreement on Tariffs and Trade (GATT) was created to remove barriers to international trade in order to speed postwar recovery and create economic interdependence, which would help create peaceful relations between countries. These institutions operated in parallel with a system of Communist bloc institutions—including the Council for Mutual Economic Assistance (COMECON), the International Bank for Economic Cooperation (IBEC), and the International Investment Bank (IIB)—that managed economic affairs among the Soviet-aligned planned economies. These architectures operated mostly independently of one another, with the "free" and communist blocs interacting mainly in the United Nations and via limited, sometimes barter-based trade.

The collapse of the Soviet Union and the end of the Cold War globalized the Bretton Woods system, as the alternative communist-bloc institutions expired with the regimes that created them. The Uruguay Round of GATT negotiations, launched in 1986, began creating an architecture for the global economy that was more inclusive of developing countries, which were no longer trapped in limbo between the US–led Western order and the Soviet-led communist bloc. The same year, China achieved observer status and began working toward eventual membership (which it was granted in 2001). In 1994, the Uruguay Round of GATT negotiations was concluded and the World Trade Organization established, on January 1, 1995. The Kyoto Protocol was signed two years later (in 1997), making good on the mandate of the UNFCCC (established in 1992, during the post–Cold War period) to combat climate change by limiting GHG emissions and obligating Annex I countries to assist developing countries with climate financing.[7]

Both of these periods of broad economic multilateralism coincided with the United States' emergence as first the superpower of the West (post–World War II) and then the world's lone global superpower (post–Cold War). The

6 A third pillar of the postwar architecture—the return to the gold standard—was abandoned in 1971, following the United States' decision to end dollar-to-gold convertibility.

7 Annex I countries were the high-income countries as of 1992, which were responsible for a sizable share of historic GHG emissions.

moderation of the Soviet Union under general secretaries Andropov, Chernenko, and Gorbachev (1983–89) concluded with its collapse as a sovereign entity and Russia's reemergence in the UN General Assembly as a much more pro-liberal order voice. All of the pillars that now undergird the global economy—the Uruguay round of GATT negotiations and the creation of the WTO, the formation of the UNFCC, and China's accession to the WTO—were erected during a brief period (1991–2001) when all the P5[8] major powers except China were on the "same side."

That era is over. Since the Global Financial Crisis (2007–09) and especially since the 2010s, dissatisfaction with the institutional pillars of the global economy has grown, as a result of several factors, including the following:

- disappointment with the adverse consequences of freer trade for high-income economies, in particular the loss of manufacturing jobs as result of the "China shock" (Autor, Dorn, and Hansen 2016; Autor, Dorn, Hansen, and Majlesi 2020; Noland 2020)
- unmet expectations about the effect market liberalization would have on democratization and prospects for world peace, particularly with respect to China and Russia (Choi 2023)
- supply chain vulnerabilities highlighted by the COVID pandemic (Solis 2020).

All are in some ways causes and consequences of the return of great power politics between the United States and its Western allies on one side and China and Russia on the other. The reelection of Donald Trump is another watershed development in the decline of multilateralism, given his revealed preference for transactional, bilateral statecraft.

The remainder of this paper proceeds as follows. The next section discusses rising economic nationalism in both high-income and developing economies. It first focuses on industrial policies and export restrictions on climate-critical raw materials, which have grown more pronounced since 2020. It then discusses the state of global economic governance institutions, focusing on the WTO, the IMF, the World Bank Group, and the UNFCCC, specifically on negotiations around climate finance. The next section addresses regional and plurilateral institutions that provide regional economic governance with broad global spillovers, focusing on the European Union and the Regional Comprehensive Economic Partnership (RCEP). The last section concludes with observations about the potential reemergence of a transactional, "tied" aid paradigm in the West as well as the role of countries other than the United States and China in moving global economic governance efforts forward in the shadow of resurgent great power competition.

8 The five permanent members of the UN Security Council: China, France, Great Britain, Russia, and the United States, each of which has veto power.

RISING ECONOMIC NATIONALISM

Economic nationalism, broadly defined, is a policy orientation that emphasizes domestic economic interests, typically through protectionism, often at the expense of policy coordination with and the economic interests of trading partners. In contrast to the broad market orientation of globalization, this approach is typically highly interventionist on the part of the government.

The period from 1991 to 2006 was one of unprecedented globalism, during which developments discussed in the previous section (the end of the Cold War, the creation of the WTO) and advances in communications and transport technology caused a surge in multilateralism and global trade. From 1970 to 1991, trade as a percentage of global GDP grew at an average annual rate of 2.0 percent;[9] between 1992 and 2006, the average rose to 3.0 percent (figure 1). This period of "hyperglobalization" was marked by rapid growth in global goods and services trade, financial flows, and the emergence of global supply chains for finished products, particularly those connecting China to high-income economies (Subramanian and Kessler 2013).

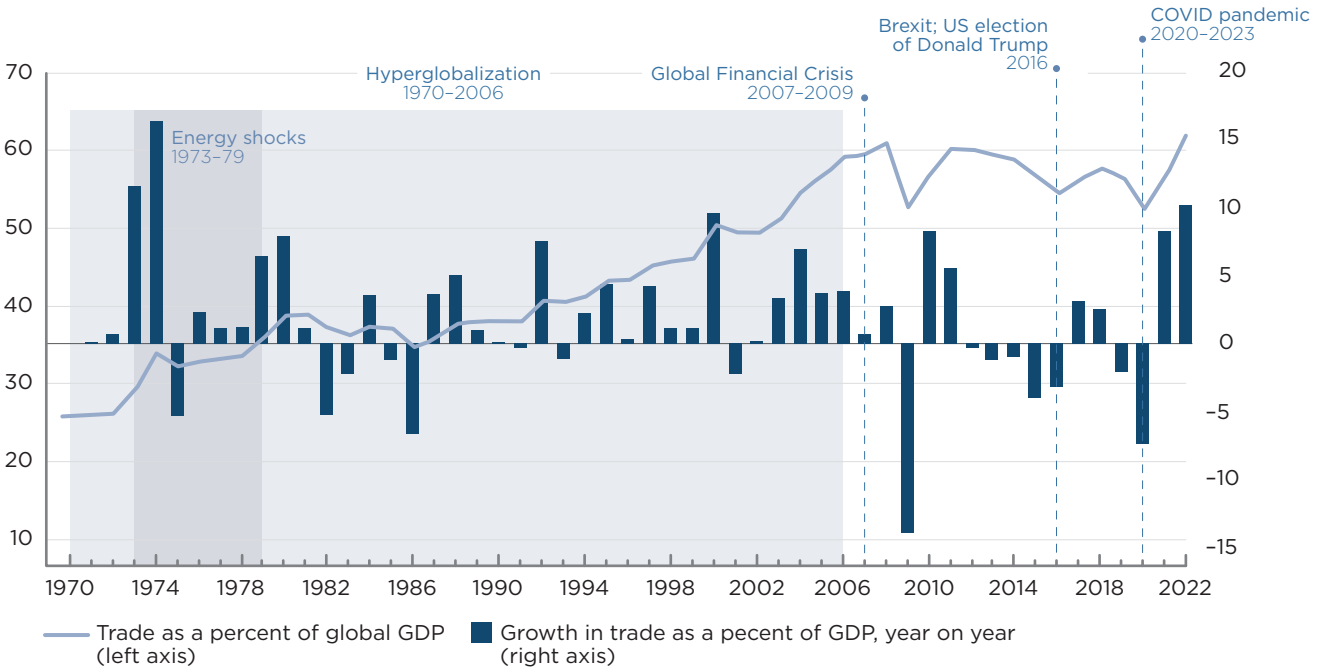
This period ended in three stages. The first was the Global Financial Crisis (2007–09), during which financial stress in the United States spread to Europe, Asia, and much of Latin America and Africa. The countries that weathered the crisis most effectively, such as China and India, were able to do so in large part because their economies were less financially exposed to global markets and more heavily regulated. A concurrent commodity shock helped soften the impact of the Global Financial Crisis on resource-exporting countries—at the cost of balance-of-payment crises and social unrest in importing countries (Brinkman and Hendrix 2013).

The second stage was the twin political surprises of the Brexit referendum and the election of Donald Trump as president of the United States, both in 2016. Both outcomes were fueled by skepticism of globalization and the virtues of market integration. In one of his first actions as president, Trump withdrew the United States from the Trans-Pacific Partnership, a preferential trade agreement that included 12 Pacific Rim economies that would have encompassed nearly 40 percent of global GDP and 20 percent of global trade (World Bank 2016). He also initiated the renegotiation of the North American Free Trade Agreement (NAFTA). The new agreement—the US–Mexico-Canada Agreement (USMCA)—contained stricter rules of origin (at the request of the United States), more access to Canada's dairy market by US producers, and the end of the investor state dispute settlement system. It was a sign that the Trump administration was interested in reforming NAFTA, and the US trade policy paradigm more broadly, in favor of US domestic interests. Trump also began a trade war with China, which his successor, Joe Biden, continued. That China is not a partner to be worked with but a threat to be contained has become perhaps the lone area of bipartisan consensus in US foreign policy.

The third, and perhaps most impactful, stage was the COVID pandemic. In addition to its massive human toll, the pandemic exposed significant vulnerabilities in supply chains for basic necessities such as food and medical

9 The median growth rate was significantly lower (1.1 percent), because of the outlier effects of the energy shocks of 1973 and 1979. From 1992 to 2006, the median growth rate was 3.4 percent.

Figure 1
Annual trade and growth in trade as percent of world GDP, 1970–2022



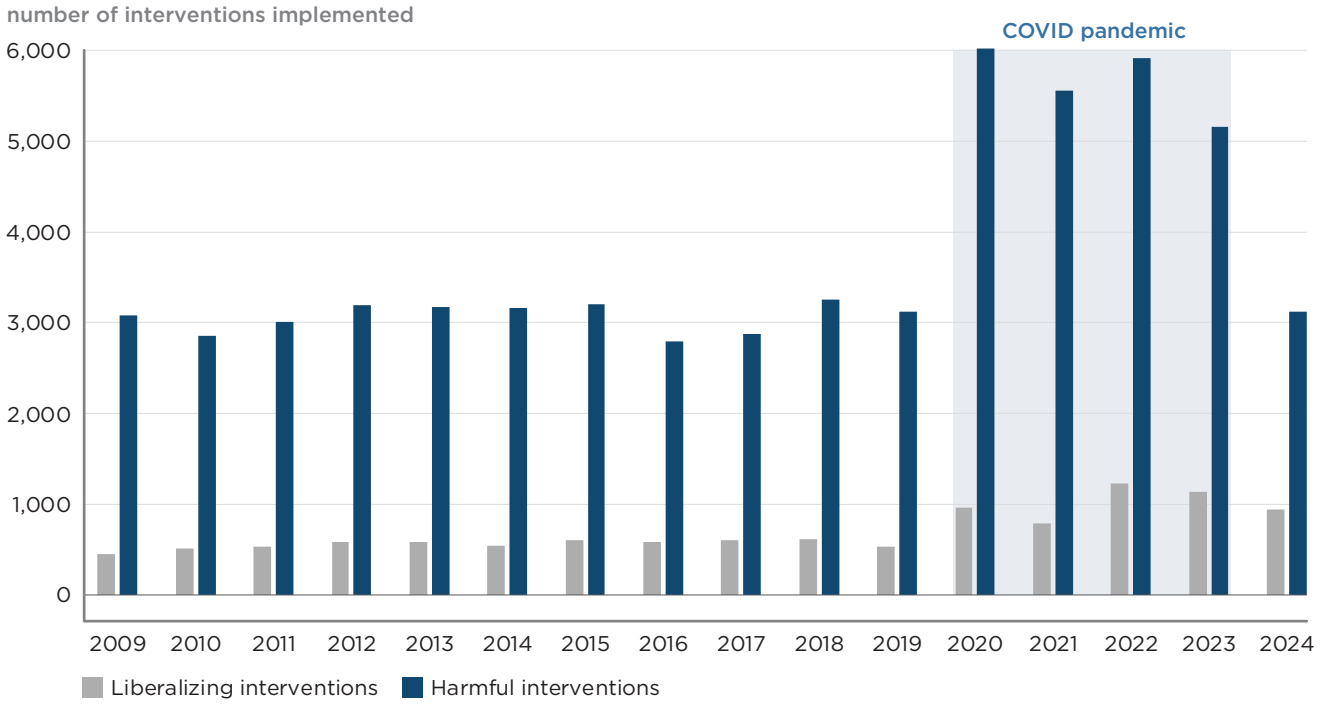
Source: World Bank 2025.

supplies (Laborde et al. 2020; Gereffi 2020) as well as advanced technologies such as semiconductors and renewable energy (Ramani, Ghosh, and Sodhi 2022; Ivanov and Dolgui 2021). Governments responded with a flurry of economic policy interventions, with harmful interventions (defined by the World Bank as unilateral actions that discriminate against foreign commercial interests) significantly outnumbering liberalizing ones throughout the period and surging during and after the COVID pandemic (figure 2). The skepticism of globalization that had previously been the purview of the Anglo-American alliance spread rapidly throughout the global economy.

With respect to climate mitigation, rising economic nationalism has taken different forms, depending on countries' positions in global clean energy supply chains. High-income economies and economic blocs, particularly the United States, the European Union, Japan, and South Korea, have sought to promote more domestic manufacturing of semiconductors; clean energy technologies (solar modules, wind turbines, etc.); and to a lesser extent the critical raw materials that underpin them. China—which has dominant market positions in the production of "legacy" (i.e., less powerful) semiconductors and the processing and export of critical raw materials—is now attempting to develop a leading-edge semiconductor industry of its own, although the decision was essentially foisted upon it after a US-led coalition implemented a series of export controls designed to limit Chinese access to these technologies.[10] In response to these

10 Chad P. Bown and Kevin Wolf, "National Security, Semiconductors, and the US Move to Cut Off China," *PIIE Realtime Economics*, November 22, 2022, https://www.piie.com/blogs/realtime-economics/2022/national-security-semiconductors-and-us-move-cut-china.

Figure 2
Liberalizing and harmful policy interventions implemented globally, 2009–24



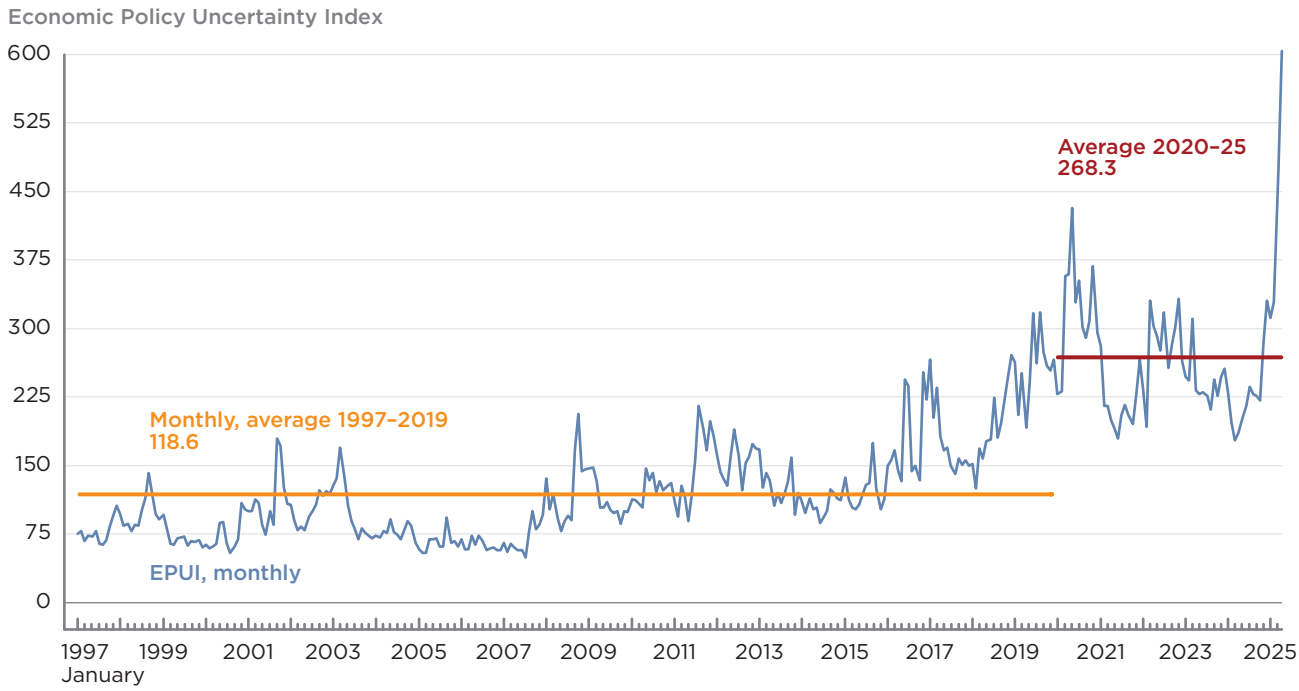
Note: Harmful interventions—which can include tariffs, rules of origin requirements, import quotas, and inbound investment restrictions—are defined as interventions that discriminate against foreign economic interests. Liberalizing interventions are defined as interventions that remove these barriers.
Source: Global Trade Alert Database (Evenett and Fritz 2022).

semiconductor export controls, China instituted its first export controls and bans of its own on a suite of critical raw materials ranging from antimony to gallium and germanium and their derivatives, which it expanded significantly in 2025.

For many resource-rich developing countries, economic nationalism has taken the form of controls or bans on the export of critical raw materials. Green energy transitions are ramping up demand for critical minerals such as lithium, cobalt, graphite, and rare-earth elements. Seeking better development outcomes, mineral-rich developing economies are keen to move beyond mining into higher-value-added activities such as processing, in order to create higher-paying jobs and increase government revenues.

In doing so, these countries are following the model established by Indonesia, the world's leading producer of nickel, a key input for producing steel and EV batteries. Indonesia has banned exports of unrefined nickel ore since December 2020, forcing investment in domestic smelters to process materials locally for export. Indonesia's seeming success with downstreaming—in just the first two years, the value of its nickel exports tripled, with only 29 percent of the increase reflecting higher nickel prices (IMF 2023)—has bred mimicry. African governments have been particularly swayed, with countries including Ghana, Namibia, Nigeria, Tanzania, and Zimbabwe either imposing bans on unrefined ore exports of various materials or mulling doing so.

Figure 3
The Global Economic Policy Uncertainty Index, 1997–2025



Sources: Baker, Bloom, and Davis (2016, downloaded June 6, 2025); Davis (2016).

This trend is not limited to Africa. Malaysia has banned the export of unprocessed rare-earth elements. Canada has introduced enhanced screening of inbound foreign investment in its critical minerals sector (Longe et al. 2023). Even Chile, perhaps the most liberal market economy in Latin America, has outlined a national lithium strategy requiring public-private partnerships in the development of lithium resources. Downstreaming the mineral sector is not without its challenges—in particular, the massive energy requirements (Hendrix 2022)—but the wide adoption of this strategy is a signal of its appeal.

One of the causes and effects of this rising tide of economic nationalism has been an increase in economic policy uncertainty at the global level. Greater policy uncertainty, or the degree to which markets and expert forecasters disagree about the likely trajectory of the economy, delays investment and hiring (Bernanke 1983); reduces spending by households and firms (Gilchrist, Sim, and Zakrajšek 2014); and constrains credit (Bordo, Duca, and Koch 2016), with particularly adverse effects for developing countries (Nguyen, Le, and Su 2020).

The Economic Policy Uncertainty Index (Baker, Bloom, and Davis 2016; Davis 2016) measures the degree to which businesses, investors, and economic forecasters are uncertain about government policies related to fiscal and monetary policy, trade policy, and regulation.

Since 2020, it has been more than twice as high as it was in 1997–2019 (figure 3). Much of that increase reflects emergency policies adopted during the pandemic (2020–May 2023). But economic policy uncertainty has been higher since the end of the pandemic than at any period except the early months of

President Trump's first term in office. In April 2025, the announcement of US "Liberation Day" reciprocal tariffs sent the index to its highest level ever.[11]

From the perspective of global climate action, this trend could be read as good news or bad news. The good news is that industrial policies like the Inflation Reduction Act (IRA) (2022) and the European Union's Green New Deal (2019) have catalyzed strong investment in renewable energy, despite a highly uncertain policy environment. Indeed, global deployment of renewables and renewable manufacturing capacity has surged even as the policy environment has become increasingly unpredictable.

The bad news is that the Republican Party's sweep of the 2024 elections puts US green industrial policy in imminent peril. The "One Big, Beautiful Act," signed into law on July 4, 2025, is not a wholesale repeal of the IRA, but it phases out tax credits for renewable energy and EVs. The law maintains the incentives related to nuclear energy, carbon capture, clean hydrogen, and biofuel and sustainable aviation fuel. The amendments to the IRA also include a widening of the restrictions related to foreign entities of concern, which are intended to keep US manufacturers from partnering with or allowing greenfield investment by Chinese firms. Whatever the merits of the national security arguments the administration has made, this measure will ensure that US EV makers, mineral processors, and the like will not be at or even near the technological frontier in this space—and leapfrogging is unlikely given the cuts to federal research funding.

The fight to mitigate climate change via global green energy transitions now faces a difficult landscape. The rapid deployment of renewable energy despite elevated policy uncertainty highlights the potential for continued progress. But rising economic nationalism and the return of major power competition underscore the precarity of the global fight to address climate change. The next section takes up the question of whether the institutions of global economic governance will be equal to the challenge.

GLOBAL ECONOMIC GOVERNANCE: THE WORLD TRADE ORGANIZATION, THE INTERNATIONAL MONETARY FUND, THE WORLD BANK, AND THE UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

The World Trade Organization

The WTO is in existential crisis. It has three basic functions: coordinating multilateral bargaining over trade barriers, administering trade agreements and monitoring compliance with them, and providing a dispute resolution mechanism to address trade disputes and assess damages where applicable. The third function has not operated since 2019, because of the United States' blocking of appointments to the WTO's Appellate Body. Without a functioning Appellate Body, the role of the dispute resolution mechanism in governing the global economy—which rests on the ability of the WTO to render final judgments and impose trade sanctions or compensatory measures—is significantly

11 The tariffs are neither reciprocal nor strategically sound. The announced tariffs, which the Trump administration has since backed away from, do not mirror the tariffs imposed on US exports or account for the vastly different economic conditions and fiscal realities that shape tariff regimes in poorer countries, many of which use tariffs to collect revenue, because they lack the institutional capacity for other forms of taxation.

diminished. Its other two functions still operate, but the current (Doha) round of WTO negotiations (2001–present) has had only limited successes, including the elimination of agricultural export subsidies and, most notably, the Trade Facilitation Agreement (TFA), which modernizes and simplifies customs procedures.[12] In late 2024, the WTO Secretariat announced that a long-anticipated agreement on fisheries subsidies—intended to help level the playing field for developing countries and reduce costly carbon emissions—would not move forward (Sumaila et al. 2021).

The biggest challenges to the WTO lay not in the negotiations themselves but in the increasingly unilateral approach to trade policy taken by the United States regarding tariffs and national security exceptions and China regarding intellectual property protections and subsidies. In 2018, President Trump threatened to withdraw the United States from the WTO; he ultimately stayed in and undermined the organization's enforcement capacity. The second Trump administration may go farther, potentially withdrawing entirely or suspending US contributions to the WTO's budget, which account for 11.4 percent of its operating costs (WTO 2024).

Frustration with the WTO is not the sole purview of the United States; developing countries, including large economies like Brazil, India, Indonesia, and South Africa, also have qualms. Their complaints range from continued subsidization of agriculture in high-income economies to rules limiting latitude for public stockholding for food security; cuts to fisheries subsidies (some developing economies are major subsidizers); and intellectual property provisions that raise the cost of life-saving pharmaceuticals, many of which would arguably not exist were it not for the profits associated with said intellectual property provisions. Despite its economic model inviting WTO scrutiny, China is by and large still supportive, as is the European Union, although the European Union has also pursued regional trade agreements, such as the EU–MERCOSUR agreement. If anti-global sentiment in the European Union rises, these positions may shift.

The value of WTO membership is directly proportional to (a) the market access it offers member-states; (b) its role in making trade negotiations less costly, especially for developing countries, by providing a one-stop shop; (c) the enforcement mechanism, which levels the playing field between large and small economies; and (d) the predictability the WTO provides. To the degree that the world's largest economies begin closing off market access, operating through more bilateral trade–related diplomacy, continue undermining the ability of the WTO to adjudicate disputes, and generally choose to operate outside WTO rules, the value of the organization will be severely diminished. It will endure in some form, however, providing a valuable mechanism for other countries to coordinate policies even if some large economies decide to operate largely outside it.

The International Monetary Fund

In view of the climate crisis, the IMF's traditional roles of monitoring and addressing balance-of-payments and government financial crises and providing technical guidance and policy advice have been supplemented by several roles related to climate governance. They are best viewed as extensions of the IMF's

12 Negotiations for the TFA began before the Doha Round.

core competencies rather than wholly new mandates. They face headwinds under the second Trump presidency, given the United States' position as the IMF's largest shareholder, a stake that endows it with veto power over major institutional decisions (Ramos et al. 2022).

One of the foremost roles played by the IMF is monitoring macroeconomic conditions and advising governments on risks to their financial position. The IMF is increasingly providing information on climate risks as part of its Article IV consultations (annual reports on the macroeconomic health and outlook for member-states' economies), including those related to (a) natural disasters; (b) the implications of energy transitions and price shocks, including its longstanding advice to curb fossil fuel subsidies; and (c) the design, fiscal implications, and macroeconomic effects of carbon pricing mechanisms (Parry, Black, and Zhunussova 2022).

Demand for this role is likely to expand, for several reasons. First, climate risks are now compounding other challenges faced by the developing countries most dependent on IMF technical advice. Second, to the extent that significant climate finance–related flows materialize, they will create large financial inflows to developing countries in which absorptive capacity may not be high; climate shocks, such as floods, droughts, and other natural disasters are recurrent; and macroeconomic imbalances are likely to emerge (Drabo 2021). Third, rising geopolitical and economic policy risk will require national governments to dedicate more resources to tracking and responding to these developments, stretching already overtasked domestic bureaucratic resources. This challenge will amplify considerably if the WTO ceases to be an effective forum for trade policy negotiation and standardization.

The IMF plays a limited role in the direct provision of climate finance. In the midst of the pandemic (2022), it created the Resilience and Sustainability Facility (RSF) to help member-countries make long-term structural investments in climate and pandemic resilience at low credit cost, in order to make them less susceptible to future climate- or pandemic-related macroeconomic crises. These funds are available to governments that meet identified income thresholds and have sustainable outstanding debt levels, high-quality and actionable plans for structural reforms to promote climate resilience, and concurrent IMF–supported financing programs outside of emergency facilities. To date, concluded RSF programs such as those in Barbados and Rwanda have been relatively small, with a total of less than $500 million committed across the two programs. Although these loan programs are welcome, the rigorous eligibility requirements and magnitude of funds available (a cumulative total of 1 billion Special Drawing Rights [SDRs], equivalent to roughly $1.4 billion) mean the facility will be a very niche provider of climate finance.[13]

Under Managing Director Kristalina Georgieva and with support from the Biden administration, the IMF made significant headway in mainstreaming climate awareness and sensitivity into its activities (Ramos et al. 2022). These efforts were present but more muted during the portion of Georgieva's

13 Special Drawing Rights (SDRs) are an international reserve asset created by the IMF to supplement member countries' official reserves. Its value is based on a basket of major currencies.

managing directorship that occurred during Trump's first administration (2019–20). This progress will likely be curtailed under pressure from the second Trump administration, which would add urgency to recurrent calls for IMF governance reform.

The World Bank

As the Bretton Woods institution tasked with reducing poverty and promoting economic development, the World Bank has a clear and large role to play in financing climate change mitigation and adaptation as well as conducting basic research on the economics of climate change. In fiscal year 2024 (July 1, 2023–June 30, 2024), the World Bank delivered $42.6 billion in climate finance, representing 44 percent of its total of $97 billion in development finance.[14] This figure puts the World Bank on track to meet its commitment, announced at COP28, in Dubai, of earmarking 45 percent of its development finance to climate finance.

Support to climate adaptation and mitigation was delivered through three channels, each with a different mandate. The International Bank for Reconstruction and Development (IBRD), which provides development financing to middle-income and qualifying (more credit-worthy) low-income countries at concessionary rates, and the International Development Association (IDA), which provides grants and low-interest loans to the world's poorest countries, provided the majority ($31 billion) of the World Bank's climate finance. Of that $31 billion, roughly a third was for adaptation. The International Finance Corporation (IFC), the arm of the World Bank Group engaging with the private sector in emerging markets, provided an additional $9.1 billion. The Multilateral Investment Guarantee Agency (MIGA), which promotes foreign direct investment in developing countries by providing political risk insurance and credit enhancements, delivered the remaining $2.5 billion.[15]

The World Bank will host the Fund for Responding to Loss and Damage (FRLD) Secretariat, established at COP27 and initially capitalized at COP28. This new compensation mechanism will provide grants to developing countries "particularly vulnerable to climate change" for emergency disaster relief, the rebuilding of infrastructure, and some longer-term resilience-building projects. Much remains to be sorted out, including how its board and secretariat will operationalize "particularly vulnerable" and the specific criteria for award eligibility and needs assessment. But as announced at COP29, the FRLD will be ready to accept contributions in 2025.

As with all efforts to finance climate mitigation, adaptation, and reconstruction, the biggest challenge remains capitalization. Total financial commitments to the FRLD stand at $768 million, with the largest contributors coming from Italy ($110 million), France ($108 million), the United Arab Emirates ($100 million), and Germany ($98 million). The United States has committed a

14 "Climate Finance Fiscal Year 2024 Snapshot," World Bank, September 19, 2024, https://www.worldbank.org/en/news/press-release/2024/09/19/climate-finance-fiscal-year-2024-snapshot.

15 The World Bank comprises the IBRD and IDA; the World Bank Group includes the World Bank, IFC, MIGA, and the International Centre for Settlement of Investment Disputes (ICSID).

mere $17.5 million.[16] Total FLRD contributions represent just ~0.2 percent of the $300 billion in annual loss and damage needs by 2030 estimated by the United Nations (Moore 2024).

The World Bank, like the IMF, is also an important research organization. Its staff economists have helped shape global understanding of the economics of climate mitigation and finance as well as helped quantify the costs of climate inaction. Like the IMF, it consults with member-country governments about maximizing the benefits of both private and public sector climate and development finance.

Both the World Bank Group and the IMF are likely to deemphasize climate change—at least rhetorically—during the second Trump administration. Perhaps the biggest change in policy terms would be for the World Bank Group to soften its position on financing fossil fuel projects, a move that some (but not all) developing country governments would welcome.[17] The 2000–14 commodity boom, during which prices for most globally traded commodities more than doubled, catalyzed a wave of exploration effort that led to the discovery of new oil and gas deposits in Ghana, Guyana, Mozambique, and Viet Nam (Hendrix and Noland 2014). Many developing countries view Western reticence to fund oil and gas projects—either bilaterally or through the World Bank—with skepticism, arguing that fossil fuels are important bridge energy sources, especially for countries that contributed negligibly to GHG emissions in the past (Osinbajo 2021). These countries will have a sympathetic ear in the White House for at least the next four years.

The United Nations Framework Convention on Climate Change

The UNFCCC is not generally considered an institution of global economic governance. Like the GATT and later the WTO, it is not an international financial institution or a rulemaking body. It is a treaty organization that provides a framework and institutional home for rounds of negotiation (COPs) of global responses to climate change that encompass efforts to reduce GHG emissions and provide needed climate finance to developing countries.

Over 29 COPs (as of June 2025), the UNFCCC has centralized climate negotiations and supported an ecosystem of side meetings at which civil society, the private sector, and intergovernmental organizations establish and coordinate climate policies. In 1997, the landmark Kyoto Protocol was signed at COP3. It was the first international treaty that committed a subset of high-income economies to reduce GHG emissions and provide climate finance to developing countries. Since the Kyoto Protocol, the most significant achievement of the UNFCCC was the Paris Agreement (2016), which committed virtually the entire international community to limiting global warming to 2°C, preferably 1.5°C, through Nationally Determined Contributions and regular reviews.[18]

16 United Nations Framework Convention on Climate Change. "Pledges to the Fund for Responding to Loss and Damage," April 7, 2025, https://unfccc.int/topics/climate-finance/funds-entities-bodies/fund-for-responding-to-loss-and-damage/pledges-to-the-fund-for-responding-to-loss-and-damage.

17 Beginning in 2019, the World Bank ceased providing funding for new oil and gas projects.

18 The Paris Agreement is more comprehensive than the Kyoto Protocol in terms of the number and diversity of economies covered. It differs from the Kyoto Protocol in that member-states are able to unilaterally develop their emissions reductions targets.

The UNFCCC has emerged as the locus of political wrangling and maneuvering over establishing mechanisms and financial commitments ("climate finance"), as outlined in the 1997 Kyoto Protocol. In addition to establishing binding GHG emission reduction targets for 37 Annex B countries, the Kyoto Protocol requires 23 Annex II countries to fund emissions reductions, adaption, capacity-building, and technology transfer to and for developing countries.[19]

The mechanisms established by the Kyoto Protocol are difficult to square with contemporary realities for two main reasons. First, the protocol established responsibility for climate finance based on historic emissions and high-income economy status, limiting responsibility to a small group of industrialized democracies. This assignment of responsibility was sensible in 1997, when those economies were responsible for well over 60 percent of historic emissions and the former Soviet Union and its Warsaw Pact allies—also significant emitters, at about 15 percent—were in no financial position to provide climate finance (Raupach et al. 2007). It failed to anticipate the changing landscape of emissions in the 21st century, during which China, India, Indonesia, and Brazil have grown to be significant emitters, or the fact that China in particular would emerge as a significant provider of development finance and a near-peer strategic competitor to the United States and its allies.

Second, the Kyoto Protocol assigned no responsibilities to affluent fossil fuel–exporting economies, whose wealth and global influence have been predicated almost entirely on hydrocarbons. The changing landscape of emissions relative to the responsibilities established at Kyoto and rising geopolitical frictions are key drivers of climate financing gaps. Whatever the merits of the Kyoto Protocol at the time, it is hard to envision Annex II country negotiators being willing or able to commit to financing the massive needs moving forward (annualized at well over $1 trillion per year just to 2030) in the presence of free-riding from new emitters and hydrocarbon exporters, many of which have substantial fiscal reserves. The fundamental question of who pays is inextricably tied to the volume of climate finance that will be offered—and this question will become even thornier as the United States has again withdrawn from the Paris Agreement and is no longer coordinating with other high-income economies on climate finance.[20]

Rising economic nationalism, geopolitical frictions among major economies and emitters, and doubts over the future of US cooperation and support for these forums are challenging the global institutions of economic governance. The great multilateral, post–Cold War moment has passed—and with it, the consensus around the rules-trading order embodied by the GATT/WTO has dissipated. Frustration with the institutions of global economic governance is widespread, including among electorates in high-income economies.

19 Annex B countries are either high-income, industrialized economies or historic emitters that, at the time, were "undergoing the process of transition to a market economy"—effectively the European successor states to the Soviet Union and former Warsaw Pact members. The 23 Annex II countries are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, and the United States (signed but not ratified).

20 The United States signed but never ratified the Kyoto Protocol, so the legal basis for compelling its contributions is dubious.

Prospects at the global level are grim, but many regional or plurilateral forums, ranging from the European Union to regional development organizations and trading blocks, provide economic governance in a more patchwork fashion. The next section discusses selected institutions and major policy innovations they have produced.

REGIONAL AGREEMENTS WITH GLOBAL IMPLICATIONS

The European Union

Among plurilateral governance arrangements, the European Union stands out for the depth of its market and governance integration, dependence on energy imports, and emphasis on environmental protections. As the second- or third-largest global economy and trader,[21] it has market power to shape global markets and standards. Because it centralizes trade policy under the Common Commercial Policy[22], it brings significant market share and bargaining authority to international negotiations.

This section examines three climate-related policies/regulations that promote mitigation and/or have implications for global energy markets: the Emissions Trading System (ETS), the Carbon Border Adjustment Mechanism (CBAM), and the Corporate Sustainability Due Diligence Directive (CS3D). The European Union's weak postpandemic economic recovery and rising anti-climate populist sentiment may make sustaining these and other mitigation-related policies difficult.

Although cap-and-trade mechanisms were pioneered by the United States,[23] the ETS is the world's largest and most liquid emissions trading platform. Economists have long extolled the virtues of cap-and-trade systems, which establish annual emissions limits (which decrease over time) for covered industries and allocate emissions allowances to firms operating in covered industries. Because these allocations are transferrable, they create a market incentive for companies to engage in GHG emissions–saving practices in order to sell off unused portions of their quotas.

The ETS accounts for approximately 87 percent of the global carbon market.[24] In addition to helping drive down emissions, especially from power generation, it has served as a model for other carbon markets. In 2023, the European Union introduced a second market, the ETS2, which extends similar practices to building-related emissions and transportation.

The ETS creates a fundamental challenge: Sectors such as power generation are largely nontradable and often highly regulated, but firms producing carbon-intensive products such as steel, cement, and aluminum

21 The ranking depends on whether GDP at constant prices or purchasing power parity is used (IMF 2024).

22 The Common Commercial Policy is the framework through which the European Union conducts external trade policy, and covers tariffs, import/export regulations, anti-dumping measures, and the like.

23 In 1990, the United States introduced binding sulfur dioxide (SO_2) emissions targets for power plants and allocated transferrable caps. Emissions of SO_2 declined by 89 percent between 1995 and 2023 (EPA 2024).

24 Susanna Twidale, "Global Carbon Markets' Value Hit Record $949 Bln Last Year—LSEG," *Reuters*, February 12, 2024.

are theoretically put at a disadvantage, because they are forced to internalize the costs of carbon emissions while competing products produced elsewhere are not. The ETS thus raises competitiveness issues for European producers and is thought to encourage offshoring of carbon-intensive activities to other jurisdictions ("carbon leakage"). Evidence based on a limited and predominately nontradable set of industries suggests that the ETS has not harmed firm competitiveness (Verde 2020).

In order to prevent carbon leakage and put domestic and international producers on a level playing field, the European Union introduced the CBAM. It would impose a levy on imported products in industries at high risk of "leakage"—steel, cement, aluminum, fertilizers—based on the emissions created in their production and the difference between the European Union's carbon price (€68 per tonne of carbon dioxide equivalent [tCO_2e] as of December 6, 2024) and the carbon price in the exporting country. The CBAM also creates an incentive for countries exporting to the EU market to adopt a carbon price of their own (Boute 2024). In a sense, the CBAM uses market access as a reward for emissions-curtailing investments in power generation and industrial practices abroad.[25]

The CBAM is currently in a transitional phase, during which importers of carbon-intensive goods are required to report carbon emissions embedded in the imported goods. Beginning in 2026, it will begin imposing duties on imports.

The CBAM has been remarkably successful in catalyzing policymaker interest in carbon pricing and carbon border adjustments. Since it was proposed in 2021, the number of pricing and/or border adjustment mechanisms either implemented, under discussion, under consideration, or in development has increased globally from fewer than 10 to more than 40 (Clausing et al. 2024). It represents perhaps the most market incentive-compatible approach to reducing emissions, as it provides both profit- and revenue-maximizing incentives for firms and governments outside the European Union to converge to EU standards (Clausing and Wolfram 2024).

Nevertheless, the CBAM has been met with criticism from both other major economies—principally the United States and China—and developing countries. The United States, which does not price carbon emissions, and China, which has a much lower carbon price (about $13 per tCO_2e), object on competitiveness grounds.[26] Developing country objections are similar but more extensive and extend to the onerous nature of emissions reporting the CBAM will require, especially in light of capacity gaps and limited finance available for decarbonizing energy systems and reducing embedded emissions in developing country exports (Magacho, Espagne, and Godin 2024). Despite the significant merits of the CBAM as a mechanism for promoting decarbonization, it is another source of rising trade and geopolitical frictions.

25 Clausing et al. (2025) recommends pairing the CBAM with the creation of a heavy industry climate coalition that would apply a carbon fee (or equivalent transferrable credits) to heavy-emissions industries like aluminium, iron and steel, cement, and fertilizers.

26 California, the United States' most populous and economically productive state, has a carbon price of approximately $40 per tCO_2e.

The CS3D, which entered into force in July 2024, will have significant implications for environmental governance and global supply chains. It mandates an EU–wide set of standards for human rights and environmental due diligence practices and reporting, with the intent of identifying, preventing, and/or mitigating negative human rights and environmental impacts throughout companies' value chains. It targets EU–based companies with over 1,000 employees and net annual worldwide turnover of more than €450 million. It will also be applied to non–EU companies meeting the turnover threshold on business in the European Union, as well as non–EU and EU franchises at lower turnover thresholds.

But the nature of the directive—which makes these large firms accountable for their entire supply chains, including the practices of suppliers—implies that its effects will extend around the globe. As in the CBAM, the goal is to incentivize better human rights and environmental performance more widely, using EU market access as the carrot for foreign firms. But this access will not be costless: In addition to imposing a cost of complying with the directive, at the margin it will move global supply chains into jurisdictions in which monitoring, especially by third-party specialists, is more likely to be credible. The effects for China, where third-party audits and auditors face an increasingly difficult operating environment, are likely to be net-negative, as are the effects for other countries with highly restrictive media and civil society environments (Hendrix and Noland 2021).

Driven by both the climate crisis and energy security concerns, the European Union has established the most comprehensive plan for decarbonization of any of the major economies, and they are designed to help extend the reach of these policies to its trading partners. Europe's high energy costs threaten the sustainability of these policies, however, and contribute to a growing productivity gap with its peer competitors and domestic political opposition. The sustainability of these policies may ultimately hinge on significant reforms to the European electricity market, which is still highly segmented and acts as a brake on renewable deployment at scale in regions with vast renewable potential (Draghi 2024). Successful reforms could bring down energy costs without expanding fossil fuel consumption.

The Regional Comprehensive Economic Partnership RCEP is the world's largest preferential trade agreement or trade bloc by (nominal) GDP. It is also the youngest, having entered into force January 1, 2022. Its 15 member-states represent roughly 30 percent of the world's population and GDP but 38 percent of global emissions, driven particularly by China and Indonesia, whose economies are relatively GHG–intensive (table 1). Members vary widely in market size and contributions to global emissions.[27] They include East/Southeast Asia's three largest economies (China, Japan, and South Korea) as well as some of its smallest and least developed economies. In contrast to the European Union, RCEP does not specifically address climate change.

The energy futures of RCEP and its members, which produce nearly 40 percent of global GHG emissions, will be pivotal for addressing continued

27 Kao Kim Hourn, "RCEP High-Level Dialogue on Economic and Trade Cooperation," remarks at the Association of Southeast Asian Nations (ASEAN) meeting, September 24, 2024.

Table 1

Percent of global GDP, greenhouse gas emissions, and population of member-countries of the Regional Comprehensive Economic Partnership (RCEP), 2023

Country	Percent of global nominal GDP	Percent of global greenhouse gas emissions	Percent of global population
China	17.1	26.0	17.5
Japan	3.9	1.9	1.5
South Korea	1.6	1.2	0.6
Australia	1.6	1.1	0.3
Indonesia	1.3	3.6	3.5
Thailand	0.5	0.8	0.9
Malaysia	0.4	0.8	0.4
Philippines	0.4	0.5	1.4
Singapore	0.5	0.1	<0.1
Vietnam	0.4	1.0	1.2
New Zealand	0.2	0.1	<0.1
Myanmar	<0.1	0.4	0.7
Cambodia	<0.1	0.2	0.2
Laos	<0.1	0.1	0.1
Brunei	<0.1	<0.1	<0.1
Total	28.0	37.7	28.6

Note: Totals may vary slightly because of rounding.
Source: World Bank 2025; Jones et al. (2024); Our World in Data (2024).

growth in emissions. If implemented in full by 2032,[28] RCEP will reduce trade barriers across member-states for most trade in goods, increasing economic output substantially. Unless RCEP members radically shift their energy mixes toward renewables, however, these economic gains will come with a significant carbon budget, estimated at up to a 3.1 percent annual increase in global emissions—roughly the rate of global economic growth in recent years (Tian et al. 2022).

28 The 10-year window of implementation and staged tariff reductions began when the treaty went into force in 2024.

These estimates assume a fixed GHG intensity of economic production. There is ample room to bend the curve through power generation through renewables, which is growing, albeit at an uneven pace across member-states, ranging from above 75 percent in the People's Democratic Republic of Laos to less than 1 percent in Brunei (IEA 2025). The bloc's largest economies, China, Japan, and South Korea, are also deploying renewables at varying rates. China has already surpassed its official targets for deployment by 2030; growth in Japan and South Korea has been much slower, despite the obvious attractiveness of renewable energy for these economies, which, like China, are deeply dependent on energy imports.

The impetus for greening the energy mix within RCEP will not come from RCEP itself, at least not directly. The agreement does not contain any specific, binding provisions targeting emissions or the deployment of renewable energy. It will lower these costs by reducing tariffs on environmental goods, including solar and wind energy modules and associated energy storage systems, and to the extent it provides economies of scale, it may help reduce the energy intensity of production by weeding out firms with higher production costs and carbon emissions. But these effects are aspirational and ancillary to the main intended effect: creating a common Asian market that will substantially boost intraregional trade.

This lack of ambition on the climate front is notable not just because of the contributions of RCEP economies to global trade and emissions but also because RCEP is a significant potential platform for offering climate solutions. The factor and natural resource endowments of its member-states, as well as its massive scale, suggest that it could be a powerhouse in terms of bringing climate mitigating technology to the global market. If this scale were paired with emissions or energy-mix targets, RCEP could emerge as a key driver of global emissions reductions.

CONCLUSIONS AND PATHS FORWARD

The institutions of global economic governance may be at their most vulnerable point since the 1970s. The story of that decade, however, was ultimately one of institutional renewal and adaptation. The Bretton Woods system of fixed exchange rates may have collapsed, but the IMF and World Bank adjusted to new roles and mandates and the GATT continued to gain members, setting the stage for the flourishing of the global economy in the coming decades. Time will tell whether these institutions will be malleable enough to survive rising economic populism and geopolitical competition.

This section discusses a potentially controversial mechanism for making some portion of needed climate finance incentive compatible for high-income economies under increasing economic nationalism. It also points to the important role that other countries (or "middle powers") will have in charting the future of global economic governance and the reform of enabling institutions, which is currently being driven by a patchwork of more regionally focused agreements with global ramifications.

The Reemergence of Tied Aid

"Tied aid" is development assistance that requires the recipient to purchase goods and/or services from the donor country or specified third countries. An example is US foreign military financing, which typically requires recipients to use the assistance to procure US arms and related services.

Re-embracing tied aid may be one means of providing climate finance that is incentive compatible under increasing economic nationalism and geopolitical competition, especially in high-income and large developing economies. It could be used to promote greater willingness to provide climate finance by subsidizing the deployment of green technologies in the developing world and production of those technologies in high-income and large developing economies.

The logic is straightforward. Lowering GHG emissions is a costly global public good. Global public goods will be underprovided unless there is a large provider (or club of providers) that stands to benefit enough individually to provide them or incentives (compensation to contributors) are provided (Olson 1965).

By tying green financing to the purchase of nationally produced goods, high-income and large developing economies could both provide needed climate finance and promote their countries' domestic industries. A variant of this argument was made forcefully by Brian Deese in "The Case for a Clean Energy Marshall Plan," published in *Foreign Affairs* in 2024. His article emphasized US policy, but in principle the idea could apply to any country that provides development assistance, has made commitments to provide climate finance on concessionary terms, and has an industrial base that produces green technologies.

Tied aid is viewed poorly in development circles, for several reasons. It is inefficient, often requiring recipients to source goods and services that could be purchased cheaper on the open market. It may harm the economies of recipient countries by crowding out the development of their own private sectors and state enterprises that could otherwise provide the goods and services. And it is inherently self-serving from the perspective of the donor rather than oriented around the economic development and welfare concerns of developing countries. These are the main reasons why the Development Assistance Committee (DAC) of the OECD officially recommends that its members untie development assistance (DAC 2021). In 2022, tied aid accounted for 19 percent of DAC members' Official Development Assistance (ODA) (Simonds 2024).

The admonition to untie aid came in 2001, at a time when DAC members were responsible for most foreign aid through both direct (bilateral) and indirect (development bank) channels. At the time, untying aid was an issue for a relatively homogeneous set of high-income democracies with broadly similar orientations toward the liberal order. Untying aid was thus about solving coordination dilemmas among countries with similar goals and sensibilities.

The landscape today is very different. Although DAC continues to provide the majority of ODA, the donor community is much more diverse, and non–DAC aid donors/providers have few qualms about using aid to their benefit. In 2009, non–DAC bilateral donors provided 1 percent of combined DAC/non–DAC member bilateral ODA; between 2018 and 2021, that share had grown to 12.7 percent

(OECD 2025).[29] This number vastly understates the changed development assistance landscape, as China is not included in these statistics, in part because China in the 21st century has largely eschewed the traditional, concessionary aid model embodied by DAC members' approaches.

China provides some aid in forms that correspond to the DAC's definition of ODA,[30] but its recent major development initiatives, such as the Belt and Road Initiative, have come in the form of interest-free or below-market loans for the construction of public facilities and large infrastructure projects (Yuan, Su, and Ouyang 2022). These projects typically employ largely Chinese workforces and China-sourced inputs. They also come with diplomatic strings attached, specifically nonrecognition of Taiwan (Hendrix and Noland 2014; Yuan, Su, and Ouyang 2022). Chinese aid is thus explicitly tied to and contingent on diplomatic cooperation in ways DAC donors' aid has not been in the 21st century.

China is not the only actor operating this way. Hydrocarbon-exporting Gulf states, in particularly Saudi Arabia, Qatar, and the United Arab Emirates, provide development assistance in ways that align with their diplomatic and strategic objectives, especially in the Middle East and North Africa (MENA) (Young 2022). The International Institute for Strategic Studies has labeled these practices "bailout diplomacy," in which Gulf states provide finance in times of crises to MENA governments in exchange for support in international forums and/or policy concessions (Alhasan and Lons 2023); these countries also fund more conventional poverty alleviation-targeted programs. Russia largely follows this model as well, with its aid targeted at strategic regions (the former Soviet Union, Africa, Latin America) and conferred on countries that support its positions on contentious issues at the United Nations, such as diplomatic recognition of Abkhazia and South Ossetia (Asmus, Fuchs, and Müller 2018).

With geopolitical tensions rising, it will not be surprising if Western countries reembrace tied aid, both generally and specifically with respect to climate mitigation finance. Tied aid is not a first-best solution. It is an inefficient solution, providing less mitigation per dollar committed. But as the Trump administration has already dismantled the US development assistance apparatus, it may be one of the few mechanisms through which large North–South climate transfers could be reconciled with increasing economic nationalism—both green tech–specific and generally—in high-income and large developing economies. The future of aid—with or without the United States—may more closely resemble the geopolitically driven aid agenda that prevailed during the Cold War.

29 In 2022, this share declined to 9.4 percent, largely because of increased aid to Ukraine from DAC members in North America and Europe following its invasion by Russia (OECD data for 2022 or most recent year available).

30 ODA is development finance "provided by official agencies, including state and local governments, or by their executive agencies; and each transaction of which: is administered with the promotion of the economic development and welfare of developing countries as its main objective; and is concessional in character. In DAC statistics, this implies a grant element of at least: 45 per cent in the case of bilateral loans to the official sector of LDCs and other LICs; 15 percent in the case of bilateral loans to the official sector of LMICs; 10 per cent in the case of bilateral loans to the official sector of UMICs; and 10 per cent in the case of loans to multilateral institutions" (OECD, 2024, "Official Development Assistance: Definition and Coverage," https://www.oecd.org/en/topics/sub-issues/oda-eligibility-and-conditions/official-development-assistance--definition-and-coverage.html).

The Role of Third Countries

The future of multilateral economic governance may lay in the hands of third countries. The international system is trending back toward a bipolar balance of power, with the United States and China as the poles, and narrowing what these major powers consider in their national interest. The great power competition that emerges may look more like 18th century bipolarity during the mercantilist period than the competing multilateralisms of the Cold War, with the policies of both the United States and China policies driven by both security concerns and economic nationalism.

As important as these poles have been—both as markets and, in the case of the United States, as a guarantor of freedom of navigation and security on the high seas—they nevertheless represented only 22.8 percent of total global trade in goods and services in 2024.[31] The European Union, Japan, the United Kingdom, South Korea, India, and Singapore have much to lose if the institutions of global economic governance becomes moribund, as do the many small, open economies of the developing world, especially countries with weak governance institutions (Tang and Wei 2009). If global economic governance is to be reinvigorated generally and with respect to climate mitigation and adaptation specifically, the burden of doing so will fall on these countries, which have much to lose and little, if anything, to gain from a world of increasing geopolitical frictions.

In both the aftermath of World War II and the end of the Cold War, a hegemonic (at least with respect to the Western world) United States sought to create institutions that could lock in changes in the global economy that would outlive these fleeting geopolitical moments: a set of institutions that would provide the benefits of hegemonic stability—in particular, open markets—even in the absence of a hegemon. If a second Trump administration withdraws the United States from the WTO, we will find out whether the institution can thrive without its greatest historical benefactor.

For the institutions of global governance to be resilient in an era of economic nationalism and increasing unilateralism by the major economies, several key reforms will need to be made:

- For the WTO, the most pressing concern is the reestablishment of a functioning dispute resolution mechanism. The 13th Ministerial Conference in Abu Dhabi (held in February–March 2024) made little progress beyond agreeing once again to commit to putting one in place. For such a dispute resolution mechanism to be acceptable to the United States, it would likely need to rebalance the scales with respect to member-states' use of trade remedies such as anti-dumping and countervailing duties, to reduce scrutiny of these practices. It would also need to acknowledge that, especially in the current climate, sovereign countries will never view third-party determinations of what constitute their national security concerns as legitimate. The WTO should recognize these designations but require member-states to compensate trading partners for national security–related tariffs and nontrade barriers with reduced tariffs on other goods and services.

31 Author's calculations based on World Bank data for exports and imports of goods and services on a balance of payments (BOP) basis. See replication files for calculations.

In addition, the WTO should move toward accepting sub-agreements created by coalitions of willing member-states. The current structure requires consensus, effectively endowing any member-state with veto power. Reforms that would allow self-selected coalitions of member-states to move forward on areas of specific interest while safeguarding nonparticipating member-states by not establishing any new obligations for them are desperately needed.

- For the IMF and the World Bank, the most important reforms will be the most politically fraught: rebalancing quotas and expanding the representation of developing countries. Doing so would likely significantly increase the emphasis on climate change within the IMF, as the developing countries of the tropics are experiencing the most significant economic and social harms from climate change (WEF 2023).[32] The IMF quota system is based on a weighted average of GDP (50 percent), openness to the global economy (30 percent), economic variability (15 percent), and international reserves (5 percent). Though objective, this formula tends to overrepresent smaller, high-income open economies while underrepresenting rapidly growing, larger Asian and African economies. In 2023, the IMF Board of Governors approved a 50 percent increase in member quotas, which increased the IMF's lending capacity to almost $1 trillion.[33] Reforming these institutions to make them more representative is needed if they are to maintain legitimacy; such reforms will be critical, and perhaps only possible, if the United States withdraws from these institutions.[34] Under those circumstances, the IMF and World Bank could be looking for a new host, with Beijing the most likely candidate.[35]

  There are also calls to reform IMF and World Bank lending procedures to account for climate-related expenditures differently in assessing debt sustainability and the viability of development projects. IMF leadership has signaled willingness to entertain such proposals. Managing Director Georgieva has suggested wider use of "debt-for-climate" swaps, in which debt would be written down or forgiven in exchange for the creation of protected areas and/or investments in climate resilience and/or providing financing in local currencies to reduce borrowing costs for climate-vulnerable countries.[36]

32 Given political dynamics in the high-income economies, particularly the European Union, this outcome is not a foregone conclusion.

33 International Monetary Fund, "IMF Board Governors Approves Quota Increase under 16th General Review Quotas," Press Release 23/459, December 18, 2023, https://www.imf.org/en/News/Articles/2023/12/18/pr23459-imf-board-governors-approves-quota-increase-under-16th-general-review-quotas.

34 If the quotas were reformed to reflect current economic realities, China's quota would roughly double and the US quota would fall below the veto threshold, which the United States would likely find unacceptable.

35 Jose de Gregorio, Barry Eichengreen, Takatoshi Ito, and Charles Wyplosz, "IMF Reform: The Unfinished Agenda," presentation at the Peterson Institute for International Economics, October 3, 2018, https://www.piie.com/events/imf-reform-unfinished-agenda.

36 Fiona Harvey, "Debt Relief Urgent for Poor Countries Hit by Climate Shocks, Says IMF Chief," *The Guardian*, June 20, 2023.

Well-intentioned though they may be, these reforms may contribute comparatively little to climate mitigation efforts. The track record of carbon offsets—essentially a private version of debt-for-climate swaps—has been spotty at best, with monitoring compliance a key challenge.[37] Debt-for-climate swaps often require country governments to make long-term commitments regarding protected areas—commitments that may not be consistent with future preferences and policy goals. And the availability of climate finance in local currencies—although obviously attractive to recipient country governments—opens those loans to significant repayment risk linked to currency devaluations and exchange rate fluctuations. It is hard to envision global creditors being willing to not just provide increased finance but also to do so on terms that provide developing countries wide latitude to unilaterally (albeit not without cost) reduce their payments through exchange rate manipulation.

The global fight against climate change is at a critical juncture. In the past decade, significant progress has been made in both committing countries to take climate action and deploy renewable energy. But massive climate finance gaps persist, geopolitical tensions are rising, and major economies are re-embracing the type of economic nationalism that in the past has led to damaging trade wars—and worse. The institutions that govern the global economy are substantially weakened, with the WTO at risk of becoming hollowed out.

Regional agreements like the European Union and RCEP demonstrate the ways in which plurilateral arrangements can help fill the gaps, in terms of both setting standards and demonstrating what a post–WTO, post-globalization economic order might look like. But these patchwork arrangements are no substitute for a broadly multilateral, rules-based order. In the short term, it will be up to the middle powers of the world—the European Union, high-income Asian economies, and developing countries that have benefitted from the WTO, despite its many identified shortcomings—to defend it.

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37 Patrick Greenfield, "Revealed: More than 90 Percent of Rainforest Carbon Offsets by Biggest Certifier Are Worthless, Analysis Shows," *The Guardian*, January 18, 2023.

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