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Getting the Green Light

THE LEGAL IMPLICATIONS OF GLOBAL TRADE RULES ON ACHIEVING GLOBAL CLIMATE GOALS

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EXECUTIVE SUMMARY

Despite the fact that the climate crisis requires great international collaboration and coordination when it comes to policymaking for mitigating emissions, the most recent report from the United Nations Intergovernmental Panel on Climate Change (IPCC) demonstrates conclusively that country leaders have not taken nearly enough action. The obstacles to climate action are myriad – political, financial and legal, national and international. This policy brief focuses on the potential legal obstacles posed by the World Trade Organization (WTO) and the network of bilateral and regional trade and investment agreements.

Global trade and investment rules are aimed primarily at limiting obstacles to cross-border economic activity by removing trade barriers, limiting regulatory barriers and increasing transparency. Those rules may also make it harder for countries to deploy certain kinds of climate policy and to design their policies in ways that simultaneously achieve development outcomes and build political will in favor of environmental protection. Furthermore, by constraining the use of certain kinds of policymaking, trade rules may be exacerbating the already exorbitant costs of meeting climate goals.

This policy brief maps an illustrative list of diverse climate policies onto existing global trade and investment rules to act as a quick test of the extent to which international legal constraints are in tension with much of climate policy as practiced by states. To freely utilize these policies without running afoul of the global trade and investment rules, new climate laws must pass through two legal filters – (1) non-discrimination and (2) a priority for liberalization. This mapping is especially important for low- and middle-income countries (LMICs), who could be precluded from deploying effective and politically feasible climate policy, and thus, may be left behind in the new "green"



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industrial revolution. Initial findings suggest that it is common for the most active countries to ignore trade rule constraints in crafting their climate policy.

Global trade rules must be reformed in a way consistent with global climate goals – so that *all* countries can implement the suite of climate policies needed to mitigate climate change while continuing to grow their economies. Reform of this sort must proceed carefully, following three core principles:

- The reform should involve actual negotiations. Some countries may be tempted to reform
 the trading system by violating the rules in a principled way in order to promote sustainability and combat climate change. This approach, however, runs the risk of undermining
 goals of international cooperation in trade and climate by reverting to a power-based, rather
 than a rules-based global system.
- The reform should take place through multilateral negotiations. Other countries have advocated for moving away from consensus-based decision-making or proposed moving negotiations to plurilateral fora, finding like-minded countries with which it is easier to agree. These approaches, however, may alienate some member states, undermining support for the institution, and making them unlikely to relieve the existing tension between climate action and global rules.
- The reform should take place through **inclusive negotiations**. Since LMICs are vulnerable to being left behind in the green energy transition due to their lack of access to particular financial and technological resources, any multilateral negotiation must place at its center the diverse voices of the Global South.

All countries will need to cooperate to funnel financial, human and technological resources to the places where they are most needed. To facilitate and support these herculean efforts, members of the WTO can take the lead by aligning the international institution with domestic climate policy priorities.

INTRODUCTION

The United Nations Intergovernmental Panel on Climate Change (IPCC) has long recommended a suite of policies for countries seeking to mitigate climate change. These policies include carbon price-based mechanisms, subsidies and incentives for transitioning to low-carbon products and processing, and regulation or standard-setting (IPCC 2007). The IPCC's most recent report indicates that current and pledged polices to cut emissions are far from sufficient to meet the goal for limiting global warming by 2 degrees Celsius (IPCC 2023). To bridge that gap, national governments must take drastic action.

However, there are numerous bottlenecks to policy adoption and implementation. Entrenched interests in coal, oil and natural gas make it difficult for countries with historically and strategically important fossil fuel industries to implement measures that may undermine those key economic actors. For other countries, the overwhelming cost of mitigating emissions while reeling from climate shocks and trying to pursue development priorities can seem like an insurmountable obstacle. There are external constraints as well, characterized by the lack of access to external finance and the legal obstacles embodied by the World Trade Organization (WTO) and the network of bilateral and regional trade and investment agreements (Chang 2002; Stiglitz 2005).



¹ For a more a helpful typological discussion of the different countries and their characteristics relative to a just energy transition, see (Gallagher and Bhandary 2023).

Global trade rules – whether multilateral, regional or bilateral – by their very nature, slow the process of national policymaking. Political and legislative stability and reliability are important for individuals and firms making production and consumption decisions in any economy, and global trade rules act to limit obstacles to cross-border economic activity by removing trade barriers, limiting regulatory barriers and increasing transparency. Those rules also make it harder for countries to deploy certain kinds of climate policy. More specifically, trade and investment rules have historically made it more difficult for countries to design environmental policies in ways that simultaneously achieve development outcomes and build political will in favor of environmental protection. Furthermore, by constraining the use of certain kinds of policymaking, trade rules may be exacerbating the already exorbitant costs of meeting climate goals.

Early discourse exploring the tension between trade rules and environmental priorities focused on how to ensure that global rules did not obstruct environmental action. Today, however, there is more urgency to not only align the trade and investment rules with climate goals, but also to leverage those rules to help achieve these goals (Trachtman et al. 2023). This policy brief begins by highlighting the political and financial costs involved in climate policymaking. It then describes the external legal obstacles presented by trade and investment agreements, which may exacerbate these costs and further discourage climate policies. It concludes with recommendations for the WTO and its member states to commit to solving these challenges through inclusive, multilateral negotiations.

THE POLITICAL AND FINANCIAL COSTS OF CLIMATE POLICYMAKING

The goals of national climate policies are not limited to decarbonization. Especially for low- and middle-income countries (LMICs), their goals rightly include economic development and diversification, equity and meeting anticipated adaptation needs (Peñasco, Anadón and Verdolini 2021). Many surveys have shown that, while climate change is a growing concern for people everywhere, it is generally outweighed by issues of more immediate concern like jobs and inflation (Bialik 2019; Loudenback and Jackson 2018; Gallup Inc. 2023). For this reason, and especially for democratic countries, adequately mitigating climate change will require a parallel effort to shore up public buy-in (Thrasher 2021).

What is more, buy-in is not guaranteed, even for successful policies. Studies reviewing impacts of climate policies show that, even when they consistently contribute to environmental goals, they have highly mixed (often negative) impacts on wealth distribution and other social outcomes within countries (Peñasco, Anadón, and Verdolini 2021; Steckel et al. 2021). Policymaking in high-income countries may also have negative spillovers effects in LMICs – placing an even larger burden on countries with more financial vulnerability (Banga 2022; Titelman et al. 2023). This contributes negatively to the political will within LMICs, as constituents connect their experienced economic hardship to climate policymaking.

In addition to political challenges, climate action itself can be very expensive. Experts predict that at least \$1.4 trillion per year will be needed in domestic financing from emerging markets and developing economies (excluding China) by 2025 (Songwe, Stern and Bhattacharya 2022). That cost covers only climate mitigation efforts and not the additional cost of reaching the United Nations 2030 Sustainable Development Goals (SDGs). Moreover, domestic financing alone is still not sufficient, as researchers have estimated an additional \$1 trillion per year is needed in external finance by 2030 – from developed country pledges, development banks and private lenders and investors (Songwe, Stern and Bhattacharya 2022).

The current calculations around climate finance posit a pathway forward which is a necessary (though not sufficient) condition for a successful global response to climate change. Where countries can mobilize the necessary amount of financing, crowd in equal amounts of external finance and accompany it with additional policies supportive of economic restructuring toward a low-carbon future, the possibility arises that countries could decouple their economic growth from increased emissions. In other words, countries may be able to shift the composition of their planned policies and investment for economic growth such that they meet the dual purpose of development and accomplishing a clean energy transition (Songwe, Stern and Bhattacharya 2022).

The same countries for whom sustainable long-term growth will rely on this "decoupling" effect, however, are also the most vulnerable to climate change impacts and the most exposed to economic impacts of climate policy in high-income countries. As noted, research has predicted larger negative economic spillovers from developed countries' climate policies into LMICs (Banga 2022; Titelman et al. 2023). Concomitantly, developing countries also have the most room to grow in the new, low-carbon global economy. LMICs are keen to not be left behind in the green industrial revolution and many are already taking steps toward a low-carbon transition and a net-zero economy. To further encourage aggressive climate policymaking, national actors and international institutions must take action to lower the costs and make it easier for LMICs to act.

GLOBAL TRADE RULES: HIGHER HURDLES FOR CLIMATE POLICYMAKING

International trade has a troubled history with environmental goals. On the one hand, global trade rules could theoretically contribute to helping countries increase their fiscal space and public finance available for meeting climate goals. Indeed, if trade growth accomplishes its goal of encouraging economic growth through increased flows, then it could, over time, build country capacity to take more climate action. The stated goals of the WTO are to liberalize and thus encourage trade in order to "rais[e] standards of living, ensur[e] full employment and a large and steadily growing volume of real income and effective demand... while [it] allow[s] for the optimal use of the world's resources in accordance with the objective of sustainable development" (WTO 1994).

However, increased trade is strongly correlated with increased carbon emissions (Peters and Hertwich 2008). There is theoretical support for the presence of an Environmental Kuznets Curve (EKC), wherein a country may reach a point in their per capita gross domestic product (GDP) at which their economic activity has a net positive effect on the environment (Grossman and Krueger 1995). At this point, however, early studies of an EKC did not include the same findings for carbon emissions and more recent empirical research has so far been mixed (Karmellos et al. 2021; Tenaw and Hawitibo 2021; Pilatowska and Wlodarczyk 2018; Clement and Isbi 2018; Dent 2022; Chatterjee 2023; Stern 2017).

What is more, there is ample evidence that global trade rules make it harder for countries to engage in climate policymaking. Specifically, the rules make it more challenging for countries to strategically structure their policies in a way that builds national political will (India - Certain Measure Relating to Solar Cells and Solar Modules 2016; United States - Certain Measures Relating to the Renewable Energy Sector - Report of the Panel 2019) and allows them to expand fiscal space and public investment for climate change mitigation and adaptation (Dutt and Gallagher 2020; Rolland 2019). There is a rich literature exploring the role trade agreements play in constraining policy space for industrial development generally (Aiginger and Rodrik 2020; Andreoni, Chang, and Estevez 2019; Chang 2006; Stiglitz 2005). There is also a growing literature around the consistency of specific climate

policies with global rules (Kleimann et al. 2023; Espa 2022; Leonelli 2022; Trachtman 2017; Meyer and Tucker 2022).

This policy brief seeks to expand that literature by mapping an illustrative list of diverse climate policies onto existing global trade and investment rules. The mapping reveals that international legal constraints are in tension with much of climate policy in practice. However, that tension has not kept countries from taking climate action. Many, like the countries described in this brief, are apparently unconcerned by legal obstacles at the WTO or elsewhere.

Although global trade rules may not pose an obstacle to climate policymaking in the United States, the European Union or even New Zealand (See Annex Table A), it may slow climate action in LMICs. If developing countries consequently wait for developed countries to "go first" in climate policy, they will not only fail to contribute to global climate goals, they will endanger their progress toward development as well. LMICs' more carbon-intensive exports could lose access to the biggest markets, decreasing in global market share overall (Titelman et al. 2022). If LMICs are precluded from deploying strategic industrial policy, they could ultimately be left behind in the new green industrial revolution or lose what progress has been made, leading to deindustrialization. To avoid such an outcome, the global trade rules must be reformed in a way consistent with global climate goals – so that *all* countries can implement climate policies to mitigate climate change while continuing to grow their economies.

Relevant WTO Rules and Climate Policies

In general, climate policies take the form of "carrots," "sticks" and regulations. "Carrots" are laws and policies that encourage economic activity that results in relatively fewer (or no) carbon emissions. By contrast, "sticks" are laws and policies which discourage economic activity that are relatively more emissions intensive. To freely deploy these policies, without running afoul of the global trade and investment rules, new climate laws must pass through two legal filters – (1) non-discrimination and (2) liberalization.

Any climate policy aimed at encouraging lower carbon activity must do so in a non-discriminatory manner, not preferring domestic products, services or investment over foreign competitors ("national treatment") and not preferring the products, services or investment of one trading partner over another ("most-favored nation treatment"). Similarly, any climate policy aimed at discouraging emissions intensive activity must also do so in a non-discriminatory manner and any regulation must be non-discriminatory on its face, as well as in its application. Moreover, the global trade and investment rules prefer climate policies promoting low-carbon activity to not unduly interfere with the flow of goods, services or investment across borders – in other words, policies that do not thwart the goal of liberalization. Likewise, the rules prefer climate policies that discourage or regulate emissions intensive activity to disrupt trade as little as possible.

The WTO, and the parallel network of bilateral and regional trade and investment agreements, contains many common provisions aimed at reaching the dual goal of non-discriminatory trade liberalization (Andreoni, Chang, and Estevez 2019; Kumar and Gallagher 2007; Thrasher 2021). Some rules are oriented toward the kind of international economic activity they seek to protect or liberalize – like agreements governing trade in goods, trade in services and foreign investment. Other rules are oriented around the kind of government measures they seek to regulate, like agreements governing trade-related investment measures, subsidies and government procurement. The following sub-sections draw from an illustrative set of climate policies to show which kinds of policies pass through the dual filters of non-discrimination and liberalization, and what policies do not, as shown in Table 1.

Table 1. The Intersection of Global Trade Rules and Climate Policymaking

POLICY CATEGORIES POLICIES NON-DISCRIMINATION LIBERALIZATION Setting carbon emissions tragets Institutional/Governance **Measures** Emissions tracking/reporting requirements New agencies for oversight/governance Existing agencies with new oversight tasks EE or % RE rules in new construction **Industry and Energy Measures** EE or % RE rules for buildings, appliances EE or % RE rules for vehicles Rules to increase RE deployment Logging limits, sustainable forestry Subsidies for RE connection to grid Industrial subsidies for EE or % RE Industrial subsidies for domestic EE or RE inputs Agricultural subsidies for sustainable forestry Carbon tax on emissions Border carbon adjustment (carbon tariff) **Emissions trading** Ban/phase out on fossil fuel extraction/use Demand-side subsidies **Other Measures** Public education/awareness R&F funding Public investment, other Other envrionmental regulations Legal obstacle on its face, but potential for exception to No legal obstacle on its face, but No legal obstacle Clear rule violation Key implementation may result in de overcome legal hurdle facto violation

Source: Climate Change Laws of the World 2023. **Note:** Key: EE = energy efficiency; RE = renewable energy.

Non-Discrimination in Climate Policymaking

Non-discrimination is one of the two major pillars to make up the global trade architecture. Nevertheless, a fundamental characteristic of climate policy inherently involves some amount of "discrimination" in trade policy if countries are to be able to (1) distinguish appropriately between climate-positive and climate-negative economic activity and (2) simultaneously prioritize national economic interests and development goals. The latter is especially important, given the necessity of building domestic political will, as described in the previous section.

As a foundational document of the WTO, the General Agreement on Tariffs and Trade (GATT) establishes non-discrimination as the baseline principle for many subsequent rules within the WTO, as well as the model for preferential trade agreements outside of the WTO. Distilled to its most basic idea, the GATT binds countries in their trade policies, internal taxes and regulations to treat goods from all trade partners on equal footing with one another (most-favored nation treatment, GATT art. I), and no less favorably than the competitive domestically produced goods (national treatment, GATT art. III).

These same strictures appear with some variation in the rules governing trade in services (General Agreement on Trade in Services [GATS]), investment measures (Agreement on Trade-related Investment Measures), intellectual property policies (Agreement on Trade-related Aspects of Intellectual Property Rights), subsidies (Agreement on Subsidies and Countervailing Measures), technical barriers to trade (Agreement on Technical Barriers to Trade), health and safety measures (Agreement on Sanitary and Phytosanitary Measures) and public procurement (Government Procurement Agreement) – and those are just the WTO agreements. Outside of the WTO, the national treatment standard is ubiquitous in free trade agreement chapters and international investment treaties alike (see, for example, CPTPP Arts. 2.3, 9.4, 10.3, 18.8; USMCA Arts. 2.3, 14.4, 15.3, 20.8; EU-MER-COSUR Title X Art. 2, Title XXX Art. 4).

When it comes to climate policy, however, discrimination is both a logical and pragmatic necessity. The two most famous instances of this are found in the European Union's Carbon Border Adjustment Mechanism (CBAM) and the United States' Inflation Reduction Act (IRA). The EU's proposed measure relies on distinctions between the carbon intensity of production in products from different trading partners (European Commission 2021). Based on that distinction, they charge a higher tariff on carbon intensive imports or on imports from countries without a carbon tax, thus discouraging EU firms from trying to avoid their carbon tax by moving production overseas. In the US, the IRA seeks to tie domestic jobs and economic development to subsidies for climate friendly manufacturing, as in the electric vehicle sector by making certain subsidies contingent on domestic content requirements (United States 2023).

Another well-known example is India's National Solar Mission, which conditioned subsidies for solar energy deployment on the use of locally produced solar cells and modules (India 2010). Other countries are, perhaps more quietly, engaging in the same level of active policymaking to combat the climate crisis. Costa Rica, for example, has adopted its own industrial subsidies for electric vehicle producers. These subsidies seek to strengthen upstream industry linkages by conditioning certain tax benefits on a 20 percent local content rule (Costa Rica Legislative Assembly 2018). Each of these measures directly violates the terms of global trade rules in the WTO and elsewhere (see Table 1, in red).

At the same time, Costa Rica has introduced a vast array of other policies that distinguish between renewable energy sources and traditional fossil fuel sources, including energy efficiency requirement for imported vehicles, a ban on changes to the country's forest cover and a general moratorium on oil and gas exploration (Climate Change Laws of the World 2023).² New Zealand likewise has a comprehensive set of policies aimed at phasing out the exploration and extraction of fossil fuels, including its Crown Minerals Amendment Act and its Electricity Renewable Preference Act, both of which restricts either the extraction or generation of electricity by fossil fuels (Climate Change Laws of the World 2023). Regulations which set targets and establish rules for energy efficiency and renewable energy percentages for vehicles, buildings and industries must distinguish between the use of certain technologies and energy sources. In each of these instances, the policy may not be discriminatory on its face but could have a discriminatory impact on foreign goods, services or investors depending on its implementation (See Table 1, in yellow).

Priority for Liberalization in Climate Policymaking

The second major pillar of the global trade and investment rules is the priority for liberalization. From the perspective of classical economic theory, lowering barriers to trade is analogous to introducing a new, more efficient technology (Rodrik 2012; Trebilcock, Howse, and Eliason 2013). Although it may result in losses for some in any given economy, it will have a net positive effect by expanding the total amount of wealth. There is a growing consensus, however, that liberalization might not always be the highest priority in global trade governance and that other priorities must be considered and may sometimes override it. This can be seen in measures like the EU's CBAM, which is undoubtedly an obstacle to trade, but with a clear public policy goal (see Table 1, in orange).

The priority for liberalization can be seen in both the GATT and the GATS in the country-specific tariff and regulatory bindings for each product code and services sector (GATT art. II, GATS arts. XX). The goal for these agreements has been to progressively liberalize trade over time through successive negotiations. Despite that goal, relatively little additional liberalization has taken place through the WTO since its inception in 1995. Instead, additional liberalization has proliferated through goods and services trade negotiations in bilateral and regional free trade agreements, as well as new international investment commitments in trade treaties and standalone investment agreements (Thrasher and Gallagher 2010; World Bank 2017).

Unlike the requirement of non-discrimination, however, climate policies can be congruent with the goal of progressive liberalization of trade. In fact, the most significant effort to date to align the WTO with climate goals has been an effort to increase access to (and decrease the cost of) climate-friendly goods through greater trade liberalization in strategic sectors. Costa Rica's Regulation on the Efficient Use of Energy, for example, waives import duties (thus making trade easier) for products related to renewable energy generation (Costa Rica 1994).

At the same time, the significant restructuring toward a low-carbon economy within countries is likely to have a diverse set of impacts on global trade flows – some liberalizing and some not. Although other countries have not yet adopted a broad CBAM along the lines of the EU, many policies would still have negative impacts on trade (indicated in Table 1, in yellow). Costa Rica and New Zealand have introduced additional reporting requirements and import restrictions, respectively, on new vehicles – with the goal of keeping high-emissions cars off their roads (Climate Change Laws of the World 2023). Moreover, expansive industrial subsidies programs, like the US's IRA, in addition to having potentially discriminatory impacts, may also act to make imports less competitive and have a *de facto* restricting impact on trade.

 $^{^{\}rm 2}\,$ For more specific examples, see Annex Table A.



Companion Policies

There is a subset of policies (indicated in Table 1, in green), however, that are not likely to face legal obstacles to implementation. Many national climate policies focus on building institutional capacity – through tasking existing agencies with new roles to help guide the country toward a climate-friendly economy, establishing new agencies for oversight and execution and introducing tracking and reporting requirements to keep up with changes to the environment. Morocco, for example, has created both a new National Electricity Regulatory Authority and National Agency for Waters and Forests – aimed at helping to decrease carbon emissions and protect natural resources that are most at risk due to climate change (Morocco 2016, 2020). The Moroccan government has also established a greenhouse gas inventory system to facilitate reporting of changes in carbon emissions (Morocco 2019).

Another subset of policies is aimed at increasing public awareness about the importance of energy efficiency, alternative transportation and the importance of key sectors (like agroforestry) in the climate crisis. Countries have also committed public funds to build public transportation infrastructure (as in New Zealand's KiwiRail) and to support research and development in forestry, renewable energy generation and green industrial innovation (Government of New Zealand 2023, Climate Change Laws of the World 2023). While the quantitative impact of these policies on climate outcomes is unclear as of yet, they are essential companion policies to other efforts to incentivize low-carbon economic activity while discouraging traditional carbon intensive substitutes.

MANAGING THE MISALIGNMENT

While many common tools deployed by countries to tackle climate change are not in tension with global trade and investment rules, some of the most important policies are somewhat misaligned with such rules. Anecdotally, it also seems that high- and upper middle-income countries are often the first to deploy policies that are in more tension with trade rules, as demonstrated by recent policy changes in the US and EU.

The existence of misalignment, however, does not necessarily mean that the rules would prohibit the policies. In some cases, careful implementation of domestic subsidies, taxes and regulations could have no discernable discriminatory effect on foreign goods, services or investment. For that to be the case, the measure would have to be applied fairly and equitably to any person doing business in the country without placing additional undue burdens on foreign actors. Another way otherwise misaligned policies would make it past the dual filters of trade and investment rules is through the operation of specific and general exceptions (e.g., GATT art. XX, GATS art. XIV). Based on those two mechanisms – careful implementation and exceptions – one could conclude that no action is needed to align trade and investment rules with climate policymaking (Simson 2020; Arato, Claussen, and Heath 2020; Heath and Meyer 2023).

On a more pragmatic level, where there is tension between climate policymaking and global trade rules, many point out that the WTO is not up to the task of disciplining countries for their discriminatory or trade-restrictive measures. While some countries are making policy with the understanding that they should at least attempt to comply with WTO rules of non-discrimination and trade liberalization, many of the most powerful players are consciously choosing to disregard these rules in favor of national economic and climate priorities (Trachtman et al. 2023; Meyer and Tucker 2022). While there may be good reasons for this – the climate crisis demands that at least some countries begin to take immediate climate action – the approach calls into question the institutional

legitimacy of the WTO (Meyer and Tucker 2022; Heath and Meyer 2023). Furthermore, aside from investor-state disputes, countries have not been engaged in any significant disputes involving trade measures under their myriad bilateral and regional trade agreements.³ It seems that there is no longer a global consensus that non-discrimination and liberalization should be the overriding principles of the global trade regime. One positive outcome of this is that, as the narrative shifts, LMICs may have their policy space *de facto* increased by virtue of the fact that other countries are ignoring the rules in their own jurisdictions.

REFORM STILL NEEDED

However, relying on existing exceptions may not be sufficient in the long run and allowing countries to disregard trade rules in the interest of pragmatism could lead to negative externalities, especially for low-income countries. In the recent context of the COVID-19 pandemic, many experts argued that the current exceptions were not sufficient to meet the urgency of the pandemic (Arato, Claussen, and Heath 2020; Baker 2021). The climate crisis has been compared to the COVID-19 pandemic, in that it requires all countries to take aggressive policy action in a short period of time and to cooperate as much as possible. There is also a similar urgent need for private actors to participate in this global project. If the exceptions were not sufficient in the health crisis, they are likely to be insufficient in the climate crisis, which has the potential to affect many more lives over a longer timeframe.

Second, from the perspective of many Global South countries, allowing the WTO to become irrelevant would be decidedly sub-optimal. To abandon the rules-based trading system entirely may result in a flurry of bilateral trade deals – treaties which are notorious for their trade-diversionary effects, and which result from negotiations plagued by gross imbalances of power. It could also result in a return to the pre-GATT years of power-driven, beggar-thy-neighbor trade policies. These possibilities are why many Global South countries prefer the multilateral negotiating forum and place a high premium on getting the WTO's Appellate Body up and running again (Modak & Thrasher 2023).

Finally, although some argue that climate policymaking needs to stay within the confines of current global rules, past and current state practice suggests that is impracticable at best. Indeed, given the urgent need for aggressive national climate action, it does not make sense to allow the trade and investment rules to take precedence over national (and global) public interest priorities.

POLICY REFORM PROPOSALS

The global trade rules must be reformed in a way consistent with global climate goals – so that *all* countries can implement the suite of climate policies needed to mitigate climate change while continuing to grow their economies (Peacock 2022). Reform of this sort must proceed carefully, following three core principles.

Countries must negotiate. Some have recommended "reform by doing" "in areas motivated by *bona fide* sustainability development goals" (Trachtman et al. 2023). If this path is pursued, however, the most powerful countries could continue to benefit from the global economic restructuring while the majority of the world's countries are not able to effectively participate. Furthermore, such an approach runs the risk of undermining goals of international cooperation in trade and climate by reverting to a power-based, rather than a rules-based global system. Negotiation is key.

³ The specific context of investor-state dispute settlements is beyond the scope of this policy brief but is discussed amply in the literature (Tienhaara 2018; Tienhaara et al. 2022).



Negotiation must be multilateral. Some have recommended modifying the decision-making structure at the WTO to make "legislative"-type decisions (changes to the rules) easier to accomplish (Trachtman et al. 2023). Others have turned to plurilateral negotiations to agree to a narrow subset of issues with other like-minded countries (Melo and Solleder 2018; Zampetti, Low, and Mavroidis 2022). This is a tempting approach. Very few multilateral agreements have been adopted on the basis of consensus since its inception, and progress has stalled in key areas of import for developing countries, like agricultural subsidies, special and differential treatment, and fisheries negotiations. But seeking progress by adopting two-thirds majority voting or moving negotiations outside of the multilateral forum is likely to alienate some members or undermine the relevance of the WTO further for many of its member states..

Negotiation must be equitable. One of the major complaints about policies adopted by the US and the EU, as noted, is the negative economic spillovers for LMICs. Given that rolling back those measures is not likely, high-income countries must acknowledge the distributive impacts and be willing to provide support through financing or trade concessions for countries to meet climate commitments (Titelman et al. 2023, Trachtman et al. 2023).

Adequate policy space in the global trade and investment rules is only the beginning of what the world needs to be able to tackle the climate crisis. Virtually every country in the world will need to completely restructure their economies. This will result in significant redistribution, and corresponding social unrest, if not carefully and fairly implemented. The cost of these changes is enormous (Songwe, Stern and Bhattacharya 2022). The world's countries will need to cooperate to funnel financial, human and technological resources to the places where they are most needed. To facilitate and support these herculean efforts, members of the WTO can take the lead by aligning the international institution with domestic climate policy priorities.

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ANNEX

Table A: Illustrative List of Climate Policies from Costa Rica, New Zealand, India and Morocco

Policy	Legislation/Title	Specific Measure	Status
Carbon emissions targets	Costa Rica's Decarbonization Plan		Unknown
	New Zealand's Climate Change Response Amendment Act (2019)		Unknown
Emissions tracking/reporting requirements	Morocco: National Plan Against Climate Change	Introduces greenhouse gas (GHG) inventory system	Unknown
	India: Securities and Exchange Board Regulations	New environmental, social, governance (ESG) reporting requirements for firms	In force
New agencies for oversight/governance	Morocco: Law No. 48-15	Creates National Electricity Regulatory Authority	In force
	Morocco: Bill 52.20	Creates National Agency for Water and Forests	In force
	India: Notification S.O. 4259(E)	Creates the Apex Committee for Implementation of Paris Agreement	In force
	Costa Rica: Decree No. 37926	Creates Carbon Board	In force
	New Zealand: Climate Change Response Amendment Act	Creates Climate Change Commission as independent export board	In force
Existing agencies with new oversight tasks	India: National Agroforestry Strategy 2014	Upgrades the National Research Centre for Agroforestry to a National-level institute with regional bodies	In force
EE or % RE rules in new construction	India: National Building Code	Introduces regulations on sustainability and energy efficiency	In force
	Morocco: National Plan Against Climate Change	Energy efficiency improvements	Proposed
EE or % RE rules for buildings/ appliances	India: Energy Conservation Act		In force
	Morocco: Law No. 47-09	Energy efficiency law for appliances and electrical energy	In force
EE or % RE rules for vehicles	India: "Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles" (FAME)		In force
	Costa Rica: Regulations on the Efficient Use of Energy	Includes reporting requirements on energy efficiency for imported vehicles	In force
	New Zealand: Decarbonizing Transportation Action Plan	Vehicle emissions standards including low-carbon limits for importers.	In force
Logging limits, sustainable forestry	India: Compensatory Afforestation Fund Act	Requires loggers to pay into a fund for afforestation efforts	In force
	Costa Rica: Forest Law, Law No. 7575	Ban on changes to the forest cover	In force
Rules to increase RE deployment	Morocco Law No. 48-15	Seeks to boost RE capacity and implementation	Proposed
Industrial subsidies for EE or % RE	Morocco: National Plan Against Climate Change	Green subsidies	Proposed



India: Farmer Finergy Security and Uplith- ment Campaign india: Roadmap of a sustainable and holis- tic approach to National energy efficiency Costa Rica: Regulations on the Efficient Use of Energy Costa Rica: Regulations on the Efficient Use of Energy Law, Law No. 7200 Subsidizes efficient energy use by firms India: National Solar Mission India: National Reduction Act Includes conditions extensive tax benefits on local content for EV production India: National Agroforestry Strategy Provides Special Invo-cost, preferential financing Proposed India: National Agroforestry Strategy Provides Special Invo-cost, preferential financing Proposed Inforce Towners of Invost resources that have not extracted for Zyears or mostatinable for cowners of Invost resources that have not extracted for Zyears or mostatinable for cowners of Invost resources that have not extracted for Zyears or mostatinable for Strategy Inforce Subsidies for RE connection to Morocco: Law No. 13-09 Net metering scheme for RE power generators In force Inforce Proposed Carbon tax on emissions Inforce UC Carbon Border Adjustment Webchariam Morocco: National Plan Against Climate Change Costa Rica: Decree 37926-MINIAET New Zealand: Emissions Trading Reform Amendment Act New Zealand: Ectricity (Renewable New Zealand: Emission Miniari (Petro- Rememb	Policy	Legislation/Title	Specific Measure	Status
Costa Rica: Regulations on the Efficient Walves import duties on equipment used for RE In force				In force
Use of Energy Costa Rica: Energy Law, Law No. 7200 Subsidizes efficient energy use by firms In force Industrial subsidies for dom. EE or RE inputs India: National Agroforestry Policy or RE inputs India: National Solar Mission Local content input requirements for solar energy producers Includes industrial subsidy for purchasing inputs of 20% or more of local content for EV producers Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force Includes conditions extensive tax benefits on local content of inputs to EV production In force I		· ·		Proposed
Indias National Agroforestry Policy or RE inputs India: National Agroforestry Policy explicitly to save on foreign exchange India: National Solar Mission India: National Report Solar Mission India: National Agroforestry Policy India: National Mission India: National National Mission India: National			Waives import duties on equipment used for RE	In force
explicitly to save on foreign exchange India: National Solar Mission Costa Rica: Law 9518 United States: Inflation Reduction Act Includes industrial subsidy for purchasing inputs of 20% or more of local content for EV producers Includes conditions extensive tax benefits on local content of inputs to EV productions In force Ag. subsidies for sustainable forests I Law, Law No. 7575 Costa Rica: Forest Law, Law No. 7575 Granting Forest Conservation Certificates for owners of forest resources that have not extracted for 2 years or more Costa Rica: Forest Law, Law No. 7575 Creating Forest Fund to foster sustainable for owners of forest resources that have not extracted for 2 years or more Carbon tax on emissions Morocco: Law No. 13-09 Net metering scheme for RE power generators In force Carbon tax on emissions Morocco: National Plan Against Climate Change Border carbon adjustment (carbon tariff) Costa Rica: Decree 37926-MINAET Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others New Zealand: Emissions Trading Reform Amendment Act Reforms existing emissions trading scheme New Zealand: Crown Minerals (Petroleum) Amendment Act New Zealand: Crown Minerals (Petroleum) Amendment Act New Zealand: Electricity (Renewable Preference) Amendment Act New Zealand: Electricity (Renewable Preference) Amendment Act New Zealand: Electricity (Renewable Preference) Amendment Act India: Energy Conservation Act Incides demand-side subsidies for EV In force In force Creates Semand-side subsidies for EV In force		Costa Rica: Energy Law, Law No. 7200	Subsidizes efficient energy use by firms	In force
Costa Rica: Law 9518		India: National Agroforestry Policy	· · · · · · · · · · · · · · · · · · ·	In force
inputs of 20% or more of local content for EV producers United States: Inflation Reduction Act Includes conditions extensive tax benefits on local content of inputs to EV production Ag. subsidies for sustainable forestry India: National Agroforestry Strategy for agroforesters Costa Rica: Forest Law, Law No. 7575 Granting Forest Conservation Certificates for owners of forest resources that have not extracted for 2 years or more Costa Rica: Forest Law, Law No. 7575 Creating Forest Fund to foster sustainable forest practices and capacity building Subsidies for RE connection to grid Morocco: Law No. 13-09 Net metering scheme for RE power generators in force Change Border carbon adjustment (carbon tariff) EU: Carbon Border Adjustment Mechanism Costa Rica: Decree 37926-MINAET Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others New Zealand: Emissions Trading Reform Reforms existing emissions trading scheme In force New Zealand: Crown Minerals (Petroleum) Armendment Act New Zealand: Crown Minerals (Petroleum) Armendment Act New Zealand: Electricity (Renewable preference) Amendment Act 2008 India: Energy Conservation Act Creates "energy saving certificates" for consumers that use less than average rates of energy India: FAME India: FAME India: FAME India: FAME India: FAME India: Greets voluntary carbon market, issuing carbon credits for sustainable forest projects and others Locates "energy saving certificates" for consumers that use less than average rates of energy In force Creates "energy saving certificates" for consumers that use less than average rates of energy In force		India: National Solar Mission		Phased out
Ag. subsidies for sustainable forestry Costa Rica: Forest Law, Law No. 7575 Foreward for agroforestry Costa Rica: Forest Law, Law No. 7575 Foreward for owners of forest resources that have not extracted for 2 years or more Costa Rica: Forest Law, Law No. 7575 Creating Forest Fund to foster sustainable forest practices and capacity building Subsidies for RE connection to grid Morocco: Law No. 13-09 Net metering scheme for RE power generators In force Carbon tax on emissions Morocco: National Plan Against Climate Change Border carbon adjustment (carbon tariff) Emissions trading Costa Rica: Decree 37926-MINAET Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others New Zealand: Emissions Trading Reform Amendment Act Reforms existing emissions trading scheme In force New Zealand: Crown Minerals (Petroleum) Amendment Act New Zealand: Crown Minerals (Petroleum) Amendment Act New Zealand: Electricity (Renewable Preference) Amendment Act 2008 India: Energy Conservation Act Creates "energy saving certificates" for consumers that use less than average rates of energy unchasing In force In force In force Creates "energy saving certificates" for consumers that use less than average rates of energy suring certificates" for consumers that use less than average rates of energy and consumers that use less than average rates of energy and certificates for EV purchasing		Costa Rica: Law 9518	inputs of 20% or more of local content for EV	In force
Forestry Costa Rica: Forest Law, Law No. 7575 Costa Rica: Gosta Rica: Costa Rica: Costa Rica: Costa Rica: Decree Adjustment Mechanism Reforms existing emissions trading scheme In force Resorts existing emission		United States: Inflation Reduction Act		In force
for owners of forest resources that have not extracted for 2 years or more Costa Rica: Forest Law, Law No. 7575 Creating Forest Fund to foster sustainable forest practices and capacity building Subsidies for RE connection to grid Morocco: Law No. 13-09 Net metering scheme for RE power generators In force Carbon tax on emissions Morocco: National Plan Against Climate Change Border carbon adjustment (carbon adjustment (carbon tariff) Emissions trading Costa Rica: Decree 37926-MINAET Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others New Zealand: Emissions Trading Reform Amendment Act Reforms existing emissions trading scheme In force New Zealand: Crown Minerals (Petroleum) Amendment Act New Zealand: Electricity (Renewable Preference) Amendment Act 2008 India: Energy Conservation Act Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others In force Reforms existing emissions trading scheme In force Bans new offshore oil and gas activities and restricts on-shore permitting New Zealand: Electricity (Renewable Preference) Amendment Act 2008 In force In force Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others In force In force Unknown Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others In force Creates voluntary carbon market, issuing carbon market, issuing carbon credits for sustainable forest projects and others In force Creates voluntary carbon market, issuing carbon market, issuing carbon market, issuing carbon market, issuing carbon credits for sustainable forest projects and others In force Creates voluntary carbon market, issuing carbon market, issuing carbon credits for sustainable forest projects and others In force Creates voluntary carbon market, issuing carbon market, issuing carbon credits for sustainable forest projects and others In force Creates voluntary carbon market, issuing carbon		India: National Agroforestry Strategy		Proposed
Subsidies for RE connection to grid Subsidies for RE connection to grid Morocco: Law No. 13-09 Morocco: National Plan Against Climate Carbon pricing scheme Morocco: National Plan Against Climate Change Border carbon adjustment (carbon tariff) EU: Carbon Border Adjustment Mechanism Costa Rica: Decree 37926-MINAET New Zealand: Emissions Trading Reform Amendment Act Reforms existing emissions trading scheme New Zealand: Coven Minerals (Petroleum) Amendment Act) New Zealand: Electricity (Renewable Preference) Amendment Act 2008 India: Energy Conservation Act Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others In force Reforms existing emissions trading scheme In force National moratoria on oil exploration In force 10-year restriction on new baseload fossil fueled thermal electricity generation capacity Creates "energy saving certificates" for consumers that use less than average rates of energy In force In force In force Creates "energy saving certificates" for consumers that use less than average rates of energy In force In force In force		Costa Rica: Forest Law, Law No. 7575	for owners of forest resources that have not	In force
Garbon tax on emissions Morocco: National Plan Against Climate Change Border carbon adjustment (carbon tariff) Eu: Carbon Border Adjustment Mechanism Costa Rica: Decree 37926-MINAET Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others New Zealand: Emissions Trading Reform Amendment Act Reforms existing emissions trading scheme Amendment Act New Zealand: Crown Minerals (Petroleum) Amendment Act) New Zealand: Electricity (Renewable freference) Amendment Act 2008 New Zealand: Electricity (Renewable freference) Amendment Act 2008 India: Energy Conservation Act Creates "energy saving certificates" for consumers that use less than average rates of energy In force In force In force In force In force Creates "energy saving certificates" for consumers that use less than average rates of energy In force		Costa Rica: Forest Law, Law No. 7575		In force
Change Border carbon adjustment (carbon tariff) Eu: Carbon Border Adjustment Mechanism Costa Rica: Decree 37926-MINAET Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others New Zealand: Emissions Trading Reform Amendment Act Reforms existing emissions trading scheme In force New Zealand: Crown Minerals (Petroleum) Amendment Act) New Zealand: Electricity (Renewable Preference) Amendment Act 2008 India: Energy Conservation Act Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others In force Reforms existing emissions trading scheme In force Bans new offshore oil and gas activities and restricts on-shore permitting In force Vew Zealand: Electricity (Renewable Preference) Amendment Act 2008 Creates "energy saving certificates" for consumers that use less than average rates of energy India: FAME Includes demand-side subsidies for EV purchasing		Morocco: Law No. 13-09	Net metering scheme for RE power generators	In force
bon tariff) Mechanism Costa Rica: Decree 37926-MINAET Creates voluntary carbon market, issuing carbon credits for sustainable forest projects and others New Zealand: Emissions Trading Reform Amendment Act Bans on fossil fuel use Costa Rica: Decree 36693 MINAET National moratoria on oil exploration In force New Zealand: Crown Minerals (Petroleum) Amendment Act) New Zealand: Electricity (Renewable Preference) Amendment Act 2008 India: Energy Conservation Act Creates voluntary carbon market, issuing carbon market, issuing carbon credits for sustainable forest projects and others In force In force Unknown Creates "energy saving certificates" for consumers that use less than average rates of energy Includes demand-side subsidies for EV In force	Carbon tax on emissions		Carbon pricing scheme	Proposed
Carbon credits for sustainable forest projects and others New Zealand: Emissions Trading Reform Amendment Act Bans on fossil fuel use Costa Rica: Decree 36693 MINAET National moratoria on oil exploration In force New Zealand: Crown Minerals (Petroleum) Amendment Act) New Zealand: Electricity (Renewable Preference) Amendment Act 2008 In force Demand-side subsidies In force Creates "energy saving certificates" for consumers that use less than average rates of energy In force		The state of the s		In force
Amendment Act Costa Rica: Decree 36693 MINAET National moratoria on oil exploration In force New Zealand: Crown Minerals (Petroleum) Amendment Act) New Zealand: Electricity (Renewable Preference) Amendment Act 2008 Inforce 10-year restriction on new baseload fossil fueled thermal electricity generation capacity Demand-side subsidies Inforce Creates "energy saving certificates" for consumers that use less than average rates of energy India: FAME Inforce In force In force	Emissions trading	Costa Rica: Decree 37926-MINAET	carbon credits for sustainable forest projects	In force
New Zealand: Crown Minerals (Petroleum) Amendment Act) New Zealand: Electricity (Renewable Preference) Amendment Act 2008 India: Energy Conservation Act Inforce Creates "energy saving certificates" for consumers that use less than average rates of energy India: FAME Inforce In force In force In force In force In force In force			Reforms existing emissions trading scheme	In force
Leum) Amendment Act) restricts on-shore permitting	Bans on fossil fuel use	Costa Rica: Decree 36693 MINAET	National moratoria on oil exploration	In force
Preference) Amendment Act 2008 fueled thermal electricity generation capacity Demand-side subsidies India: Energy Conservation Act Creates "energy saving certificates" for consumers that use less than average rates of energy India: FAME Includes demand-side subsidies for EV purchasing In force				In force
consumers that use less than average rates of energy India: FAME Includes demand-side subsidies for EV purchasing In force				Unknown
purchasing	Demand-side subsidies	India: Energy Conservation Act	consumers that use less than average rates of	In force
Costa Rica: Law 9518 Demand-side subsidies for EV purchasing In force		India: FAME		In force
		Costa Rica: Law 9518	Demand-side subsidies for EV purchasing	In force

Policy	Legislation/Title	Specific Measure	Status
Public Education	India: National Urban Transport Policy	Includes raising awareness and encouraging use of about alternative transportation options	Unknown
	India: National Agroforestry Strategy	Encourages agroforestry as a course curriculum in grade/high school education	Unknown
	Costa Rica: Regulation on Efficient Use of Energy, Law No. 7447	Includes public education element for increasing awareness around the benefit of efficient energy use	Unknown
R&D Funding	India: National Agroforestry Strategy	Explicitly seeks to strengthen research in Agroforestry	Proposed
Public Investment, other	New Zealand: 2019 Well-being Budget	Includes significant public investment in public transportation - KiwiRail	Proposed

Source: Climate Change Laws of the World 2023.



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