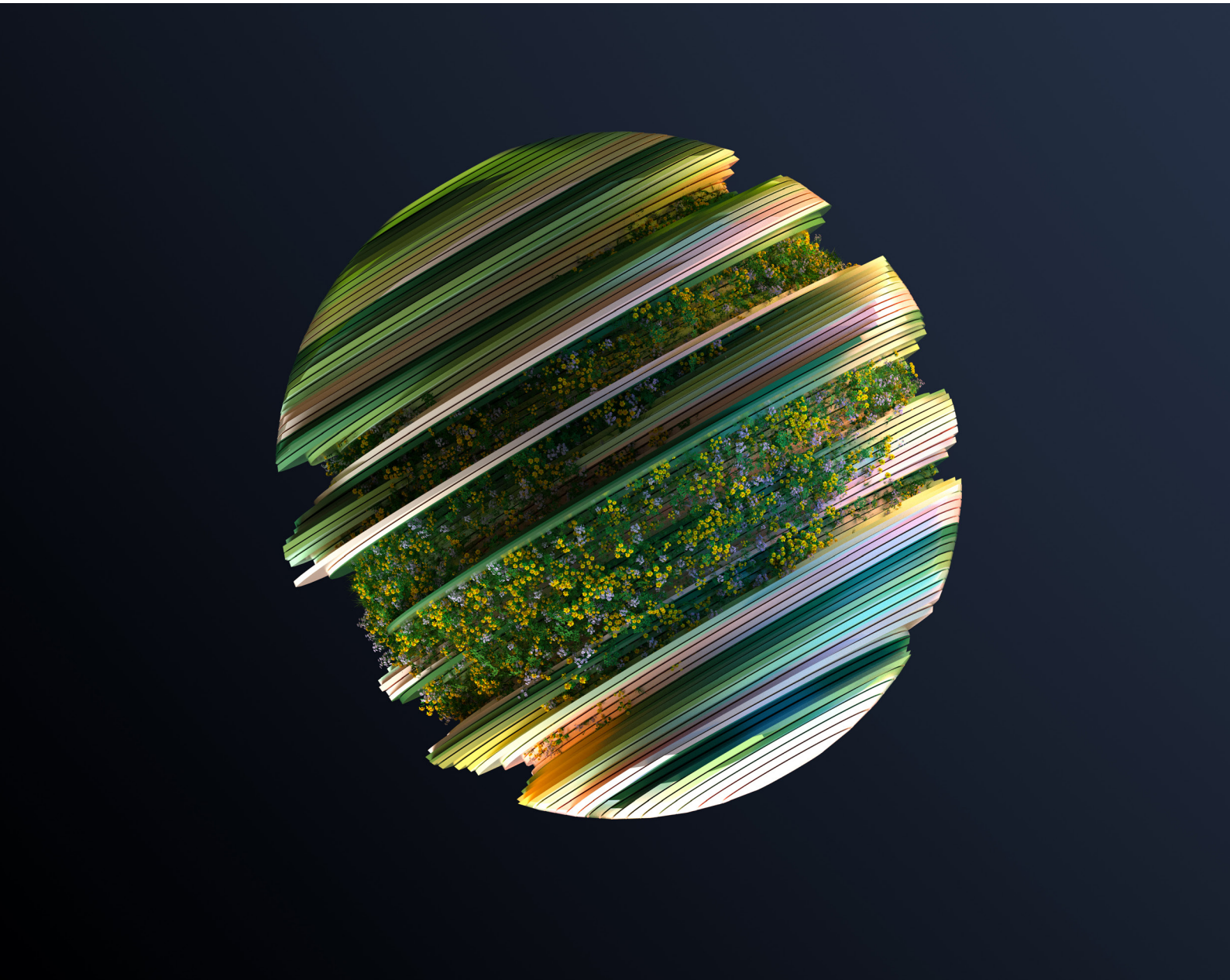
The Global Governance of the Energy Transition: Lessons for the Indo-Pacific and Latin America

Glauco A.S. Oliveira



Abstract

Amid disruptive international crises such as the COVID-19 pandemic and the ongoing war in Ukraine, ensuring a secure energy supply for development requires focused efforts by individual countries and the international community. This report examines the global governance of the energy transition from the perspectives of the Latin American and Indo-Pacific regions. Despite their geographic distance, the two regions share similarities in their economic landscape and energy needs. The evolving framework of global governance presents opportunities to address environmental, energy, and political challenges. Meanwhile, emerging mechanisms such as the Sustainable Finance in the Indo-Pacific Development Network can be used to bridge the gap among stakeholders in both developed and developing countries.

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Introduction

The countries in the Indo-Pacific region face many challenges, including those related to their energy needs. In a world characterised by disruptive crises, such as the ongoing war in Ukraine and the COVID-19 pandemic, ensuring a secure and steady supply of energy to meet development goals will require concentrated efforts by each country and the international community.

The Indo-Pacific is a vast geographical area that encompasses the Indian Ocean, the western and central Pacific Ocean, and the seas connecting them, including the South China Sea, the East China Sea, and the Andaman Sea. The construct has gained increasing importance in recent years amid evolving geopolitical and strategic dynamics in Asia,[1,2] bringing to the fore a complex multilateral framework concerning trade, investment, infrastructure, and security concerns.[a] Although this geographical and geopolitical construct is relatively new, it is important to acknowledge the importance of governance mechanisms that have been evolving within it, particularly in the energy transition domain and how they can serve as examples for Latin America.

The Indo-Pacific and Latin American regions share certain similarities, synergies, and common interests regarding energy transition, which can be conducive for joint positions in new mechanisms of governance. Although the regional mix of energy supply in the Indo-Pacific remains tilted toward low-efficiency and carbon-intensive options, the region also has lessons for Latin America in terms of building up a governance model anchored in a geopolitical concept that relates to energy transition.[b,3]

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a These include non-traditional security issues, such as climate change and energy.

b According to Our World in Data (See: https://ourworldindata.org/grapher/co2-per-unit-energy?tab=chart&country=OWID_WRL~USA~CHN~IND~ZAF~AUS~BRA~MEX~SAU~OWID_SAM~European+Union+%2828%29), several countries of the Indo-Pacific region are characterised by above world average of carbon dioxide emissions per unit of energy production, for example, India, Indonesia, and Australia. Some countries of the region are also large exporters of fuels, ores, and minerals: Australia and Indonesia, not to mention Saudi Arabia, have a higher percentage of their merchandise exports in CO_2-emission-intensive sectors. Nevertheless, some countries have been able to shift towards renewable energy as a share of total energy consumption; India and Indonesia are such examples, with, respectively, 35.8 percent and 22 percent of their energy demand in 2020 comprising clean sources. See: https://databank.worldbank.org/source/world-development-indicators/preview/

Both regions are home to developing countries with large populations, although Latin America has a smaller one. There is potential for harnessing renewable sources although, at present, they rely on carbon-intensive economic structures, and a number of countries in both regions are large exporters of carbon-emitting commodities.[c] Both regions have important clean-energy projects but the imperative is to increase investments.[4] Furthermore, the two regions must overcome, among other pressing issues, poverty and unequal income distribution. The green transition could provide both regions with avenues for economic development based on the use of sustainable resources and poverty alleviation. The proper mechanism for financing these transitions requires an institutional setting that bridges the global and domestic realms.

This report addresses some of these obstacles from the perspective of the global/regional governance of the environmental and energy transitions, comparing two regional architectures, the Indo-Pacific and Latin America. It describes the institutional mechanisms where countries of these regions are involved, mainly the G20 and the BRICS, and analyses how a political-strategic regional configuration, such as the Indo-Pacific, may provide lessons for Latin America on the issue of financing energy transition. It defines concepts of governance, discusses the competing political economy of governance mechanisms in which both regions are involved, and delves into the question of bridging the international and domestic gaps in financing energy transition.

c Latin American countries are traditional exporters of mineral commodities, such as iron and cooper, and the region is increasingly becoming an exporter of crude oil and fuel. Brazil, for example, has 17 percent of its total merchandise export based on fuels in 2022 (See: https://databank.worldbank.org/source/world-development-indicators/preview/on). Besides Brazil, Venezuela, Mexico, and now French Guiana are becoming important players in international fossil fuel markets, while their governments cannot eschew oil revenues. According to the International Energy Agency (IEA), subsidies to fossil fuels are still common and surpass those to renewable sources. See: https://www.iea.org/topics/energy-subsidies

Current Global Governance Frameworks

Globalisation has transformed collective action in domestic and international politics, diminishing the space for states to act autonomously. This was the policy consensus during the last decades of the 20th century: the provision of public goods (for instance, a clean atmosphere or the carbon sequestration by tropical forests) involved the mediation of new actors, both above and below the level of the nation state. Due to structural constraints, such as fiscal crises, national governments in developing countries were not able to carry out policies to tackle environmental externalities derived from carbon dioxide emissions.[d,5,6]

The concern with public governance influenced debates after the 1980s' liberal reforms that sought to reorganise society and government in accordance with the principles and values of private markets. Governance became a primary concern of the Washington Consensus, a liberal-orthodox policy framework adopted in Latin America. Good governance should address market failures and ensure institutional reforms capable of making markets work better.[7] In this globalised policy context, although local (communities) and international (financial organisations/donor agencies) stakeholders were able to discuss environmental matters and policies, faulty public

d Todd Sandler (1997) offers an international-relations perspective on the concepts of public goods, common goods, and externalities. Casey B. Mulligan (2023) provides a recent economic analysis on the same aspects. See endnotes 5 and 6.

institutions and debt burdens in Latin America were a hindrance to the continuity of public policies that could tackle the challenges of environmental and energy transitions.

As domestic structural reforms were carried out, several national governments were able to acquire policy expertise to deal with the management of global public goods. Policies toward energy transition and decarbonisation were implemented and institutionalised with the creation of Ministries for Environmental Affairs, for example.[e,8]

At the international level, a multipolar order evolved, bringing to the fore discussions on emerging issues, such as global warming, beyond the group of a few highly developed countries. For example, the G20 and BRICS are actively discussing global challenges, offering alternative forms of governance to global problems that require the mediation of the Global South.

The international landscape has continued to change in the 21st century. Recent crises, such as the COVID-19 pandemic, the ongoing Ukraine War, and the subprime financial crisis, have highlighted the importance of keeping the focus of the policy-building process on the nation state. This, even as new forms of global governance are needed to tackle common threats, such as global warming. But what is 'global governance'?

Global governance is the exercise of authority and the establishment of norms and rules across national borders and beyond the nation state. It encompasses a wide range of institutions and actors, including intergovernmental organisations, transnational networks, and private arrangements that work jointly to address global issues and challenges. It also encompasses a process of international institution-building. Global governance is constantly evolving; it is a contested process, the subject of much debate and analysis in international relations and international political economy theory.[9]

Meanwhile, environmental and energy governance can be defined as the exercise of authority and norms across national borders in the management and regulation of global resources and

e As an example, in the early 1990s, Brazil consolidated biofuels (ethanol from sugarcane) programs aimed at diminishing the over-reliance on imported oil. This was a joint policy gathering of the Ministries of Finance, Agriculture, Energy, and Environmental Affairs, among other bureaucracies. The country developed research and subsidised crop producers and the automobile industry to adopt flexible engines. Structural reforms such as fiscal consolidation and institutional development were instrumental for improving energy policies. This policy also involved an energy diplomacy with countries such as India and China that were also willing to adopt biomass fuel programs. See endnote 8.

systems. Again, it includes the role of intergovernmental organisations, transnational networks, and private arrangements in shaping energy and environmental policies and practices. Energy governance also encompasses the contestation and politicisation of these institutions and their legitimacy in addressing global and transnational energy challenges,[10] and discussions on global environmental damages.[11] While energy governance has clear security and strategic components, especially when dealing with oil or gas extraction, environmental governance has a less obvious geopolitical implication. However, both realms are progressively mixing and are currently closely related, as global environmental threats require improved energy efficiency and the transition to renewable sources.

Criticisms of current frameworks of global governance focus on the lack of legitimacy and transparency, particularly regarding how countries that had already reached a level of economic development would limit the options of developing countries. The recent backlash against globalisation and the spread of populist politics has heightened this contestation of global governance by certain political groups, seen in discussions on trade issues at the World Trade Organization and the phenomenon of climate change denial.[12]

The inclusion of Global South countries in global governance efforts will allow such legitimacy deficits to be overcome. While the creation of new multilateral groups that bring together developing and developed countries to discuss financing the energy transition is not a panacea, it may prove to be a feasible solution to the legitimacy problem and may broaden the interests and positions proposed therein. In this context, the Sustainable Finance in the Indo-Pacific (SUFIP) Development Network[f] is one group that gathers experts and stakeholders from the Indo-Pacific region and Europe as a knowledge bank. SUFIP aims to provide an alternative multilateral governance approach in the energy, infrastructure, and environmental transition.

Latin American countries are emphasising new forms of global governance that cater to the needs of much of their population. As such, they highlight tackling global warming and climate change alongside poverty alleviation efforts. For instance, in global governance forums such as the G20, Brazilian authorities have stressed the need to widen the focus beyond environmental issues and formulate a comprehensive agenda of human development to create benefits for

f SUFIP was jointly created by the French Development Agency and Observer Research Foundation (ORF).

the poor and marginalised, who are now primarily urban-based and suffer the most from environmental harm.[13] Just as India underlined during its presidency of the G20 in 2023,[14] Brazil is proposing mechanisms to increase social participation in international financial decisions, so that the challenges of climate change can be better addressed. The UN Sustainable Development Goals (SDGs) showcase such a governance approach, integrating environmental and human debates and allowing for greater dialogue between policies.[15] A Latin America-focused institution like SUFIP could bridge developed and developing countries to find financial solutions in a region currently characterised by an urgent need for energy transition. From a broad perspective, a security-oriented regional architecture such as the Indo-Pacific deserves scrutiny from Latin American analysts, as the international policy circles of this region avoid such an approach, especially in a policy issue like energy transition finance that is regarded primarily from a technical point of view. As the example of SUFIP illustrates, there is implied politics and competition that should not be eschewed.

Competition and the Global Energy Transition

Although most stakeholders involved in the global green transition can be assumed to possess good intentions, they must contend with the reality of the global economic and political order. Therefore, it is important to consider international political economy explanations to address the role of competition among alternative multilateral governance mechanisms in the world economy. At the end of 2023, discussions at the COP28 climate summit highlighted the lack of financial resources to meet the targets envisaged by the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement. Developed countries agreed to contribute US$700 million to an alleviation fund. However, the world is far from reaching a consensus regarding the monetary magnitude of financing decarbonisation.[g,16,17]

Fostering cooperation in the energy sector will require efforts from different stakeholders who may have competing world views and interests. Global governance platforms have become important parts of the dialogue. The Indo-Pacific region must contend with various challenges in its energy transition; as such, it is important to acknowledge that the geopolitical components of the process are not a zero-sum game. Contending nations or companies might also be involved in cooperative forms of environmental governance to reach common goals. Organisations such as the G20 and BRICS Plus, and new forums such as SUFIP, could provide additional arenas for debate and problem solving.

Financing the energy transition and attracting investments for clean energy projects can be burdensome, particularly for developing countries in Latin America and the Indo-Pacific. Countries may lack a safe regulatory environment for investors. However, access to affordable

g As Geoffrey Heal (2017) remarks, the cost of avoiding climate change involves switching from fossil to non-carbon energy sources, replacing burning coal and gas with renewable sources or nuclear power in electricity generation, and switching from using gasoline and diesel to alternative energies for transportation. Conversely, Simon Dietz et al. (2018) consider that the proper pricing of carbon emissions might be another major step toward decarbonisation, but they note that price estimates still vary and global prices to incentivise the carbon transition are far from equilibrium. See endnotes 16 and 17.

capital, innovative financial mechanisms, and international cooperation are critical for scaling up renewable energy use. Many countries in both regions need adequate infrastructure crucial for enabling the transition to clean energy. Developing and upgrading transmission and distribution grids, energy storage systems, and charging infrastructure for electric vehicles are examples of infrastructure that will require financing.

Multilateral platforms can also offer advice on policy and regulatory frameworks to be adopted by their member countries. Establishing robust policy and regulatory frameworks is critical to encourage the adoption of clean energy technologies and driving climate change mitigation efforts. Developing effective policies, setting ambitious renewable energy targets, and implementing transparent and consistent regulations pose challenges that these global governance institutions can help overcome. Multilateral financial organisations, such as the World Bank or the Inter-American Bank of Development in Latin America, have provided such policy assistance for years. Therefore, new international political economy structures, characterised by emerging powers or regions, may offer a much-needed competition framework in terms of policy advice and financing alternatives.

Moving towards a multipolar financial order might be beneficial for environmental sustainability and to achieve the UNFCCC's emissions targets. Funding environmental preservation requires action from countries such as China and India, the two countries that are the world's largest greenhouse gas emitters but with lower per-capita income levels than industrialised countries. Competing with the Bretton Woods Institutions—and not substituting them—might prove more fruitful for domestic and multilateral development banks such as the New Development Bank (NDB), the Asian Development Bank, and the Indian Exim Bank.

The new multilateral arrangements must also contend with their own challenges. For example, how will countries of the augmented BRICS reconcile global environmental policy targets (e.g., decarbonisation) with their domestic economic goals, the achievement of which relies on carbon-intensive resources?

At the same time, financial institutions and donors, comprising mainly developed countries, may also experience policy contradictions. For example, a number of developed countries have established emissions markets and taxation systems to price carbon usage. In theory, the creation of markets based on the setting of maximum limits for emissions and the imposition of a carbon tax should result in a reduction in greenhouse gas emissions. Allowing free transactions to determine the equilibrium price in a regulated market will determine the amounts emitted.

These countries are members of climate clubs that establish carbon emissions limits. Yet, their recent policies have been using environmental concerns (for instance, the issue of carbon leakage) to justify restrictive, or even protectionist, trade policies. Mechanisms such as the Carbon Border Adjustment are attempts to mitigate the impact of carbon dioxide on international trade.[18] Conversely, there is a trend for domestic green industrial policies, which typically contain a certain degree of protectionism, to foster domestic capacity in renewable productive-chain components, such as solar panels.[19] Initiatives such as the US's Inflation Reduction Act also comprise subsidies and industrial policy measures that will have consequences for the country's trade partners.

In this global landscape, Latin America can provide clean energy raw materials (including key minerals, such as lithium) for the Indo-Pacific region.[h,20] Increasing diversification and improving competition in international trade and investments may be part of a geopolitical concern. This diversification, in both import and export markets and in foreign investments, might broaden renewable supply chains (for instance, for mineral inputs, solar batteries, and solar panels). Despite the geographical distance between the Indo-Pacific and Latin America, trade in basic intermediate inputs and final products may improve capacity building in the supply chains of renewables.[i,21,22] To achieve this aim, institutions of trust and governance are necessary. Therefore, these new multilateral arrangements also serve as debate arenas to iron out contradictions between global and domestic policy aims. This is especially true for SUFIP, as it is sponsored by the French Developing Agency, and France is the backbone for European Union trade policy decisions.

Finally, it is also important to address how mechanisms such as SUFIP relate to a programme such as China's Belt and Road Initiative (BRI) and the NDB. Although Chinese foreign investments have been steered towards carbon-intensive industries and sectors, such as steel

h According to the IEA, Latin America can become a supplier for the rapid growing of clean technologies. For example, it has around half of global reserves of lithium and more than a third of copper and silver, and it has as a potential for the sustainable mining and processing of these materials.

i Having said that, current trade between two of the main economies (Brazil and India) of the regions is characterised by the flow of crude oil and fuel. Recent analyses, however, consider the long term and strategic dimensions of the energy policy relations between both countries, which were pioneers in the development of biofuels, for example. Hence, it is feasible to suppose that this energy cooperation might be instrumental in setting up a basis for the mutual adoption of other renewable energy technologies. See endnotes 22 and 23.

and automobiles,[23] there are also investments in renewable supply chains.[24] China-backed infrastructure projects may spur positive externalities for the energy transition in countries receiving investments, but assessments must be made on a case-by-case basis.[j,25]

Meanwhile, there are opportunities for mission-oriented loans from NDB towards ecological projects, but this institution is still nascent, and it is too early to assess its effectiveness as an alternative source of energy transition finance.[k,26] In brief, although BRICS is a contending geopolitical concept, especially in the Indo-Pacific region, competition between different financing and development mechanisms might yet prove to be valuable for the green transition, especially for developing countries requiring investments in this area.

j A recent study, showcased in a publication from the Applied Institute of Economic Research (IPEA), suggests that China's overall approach to energy investment in Africa is not only focused on decarbonisation; thus, it is important to consider positive or negative impacts on the environments. See endnote 25.

k A recent publication from IPEA, based on case studies, assesses the potential of NDB in financing sustainable infrastructure. It considers the role of local stakeholders and institutions for connecting the bank's operations with the country-specific challenges for ecological transition. See endnote 26.

Bridging the Gap Between Domestic and Global Governance

Among global organisations and institutions, the focus should now be on how to internalise advice towards domestic policymaking and secure proper financing. Brazil and India provide concrete examples that could be considered.

Brazil's energy supply is based on renewable components, particularly hydroelectric power, which accounted for 63 percent of electricity generation in 2022.[l,27] Yet, the country is a large CO_2 emitter due to its agricultural and deforestation practices. It also has large reserves of minerals such as iron in remote, preserved inland areas and oil in the oceans. Although their exploitation might require sizeable non-carbon-neutral investments, the current government has shown a clear commitment to pursue an environmental agenda.[28] After some years of feeble support for environmental commitments at international summits, Brazil's policy mix is now turning towards sustainable projects, such as low-carbon agriculture, a new sanitation bill, and the development of renewable energy sources like wind, solar, and hydrogen.[m]

l According to the IEA, total energy supply (TES) includes all the energy produced in or imported to a country, minus that which is exported or stored. It represents all the energy required to supply end users. Brazil's TES is 51.3 percent non-renewables (natural gas, oil, coal) and 48.7 percent renewables (hydro, nuclear, solar, wind, biofuels).

m Brazil has launched a comprehensible plan for fostering, not only energy transition, but also an ecological transformation of the domestic economy. See: https://www.gov.br/fazenda/pt-br/acesso-a-informacao/acoes-e-programas/transformacao-ecologica/english-version/ecological-transformation

Important in the Brazilian experience is how it has incorporated the advice of global governance mechanisms into domestic policies and allocated financial and budgetary resources that can endure changes in government. Brazil's Climate Fund is an instrument of its National Policy on Climate Change and was established as a domestic policy response to the UNFCCC commitments. The climate fund ensures financial resources and technical support for projects and companies looking to mitigate and adapt to climate change and its impacts.[n]

India, for its part, is a crucial economy in the Indo-Pacific region, especially as it concerns the financing of green energy transition. Domestically, the Ministry of Environment, Forest and Climate Change (MoEFCC) has established ambitious and detailed plans on how the country should take adaptation and mitigation commitments within the UNFCCC framework. In the report, there is a clear role for international cooperation within institutions such as the G20.[29] The IEA has remarked on important steps toward decarbonisation and ecological transition reforms in India's clean energy investments, which have grown rapidly in the past few years in response to ambitious clean energy targets.[o]

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Conclusion

This report has sought to outline current discussions on global governance around two complex regions—Latin America and the Indo-Pacific. Countries in Latin America and the Indo-Pacific share many similarities but also have notable differences, including in their energy transition and environmental challenges. Organisations such as SUFIP are important arenas for debate and for providing coherence amid the many proposals and ideas that have been proffered,[30] particularly when devising feasible financial mechanisms for energy transition.[31]

Countries' energy transitions depend on their domestic economic structures and on the nature and manner of technical and financial solutions being provided. At the global level, of importance is the political commitment of all parties involved in the different governance arenas. Latin America was trapped for decades in a technocratic approach for structural reforms in which political considerations were not part of the policy mix. The Indo-Pacific region can foster global governance through regional multilateral platforms, such as SUFIP, to discuss technical issues such as the energy transition. It can also provide a proper setting for discussions of the international politics involved. This platform and its processes can be emulated in Latin America to help the regional countries in their energy transitions.

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About the Author

Glauco A.S. Oliveira *is Senior Researcher, Institute of Applied Economic Research, Brazil.*

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Ideas . Forums . Leadership . Impact

20, Rouse Avenue Institutional Area,
New Delhi - 110 002, INDIA
Ph. : +91-11-35332000. **Fax :** +91-11-35332005
E-mail: contactus@orfonline.org
Website: www.orfonline.org