India-Brazil Renewable Energy Relations: Explaining Emerging Power's Cooperation in Polarized and Divided World Orders

Shuichiro Masukata (Keio University)¹

As a leading power in the Latin America and Caribbean (LAC) region, Brazil is increasingly engaging with India's renewable energy diplomacy amid a fragmented global order. At the multilateral level, Brazil collaborates with India in forums such as BRICS, G20, and IBSA to address climate change and advocate for reforms in international governance. Bilaterally, the two countries have developed a strategic partnership, launching joint projects to reduce greenhouse gas (GHG) emissions by promoting renewable energy sources such as biomass and solar power. While existing studies have focused on trade and economic ties between India and Brazil as emerging powers, environmental cooperation—particularly in renewable energy—has remained underexplored.

This paper seeks to fill that gap by analyzing Brazil's evolving response to India's renewable energy initiatives, dividing the relationship into three phases: distance (2009–2016), conservative resonance (2016–2022) and renewed alignment (2023-present). Using a process tracing approach, this study demonstrates that despite leadership changes and China's rising influence in the Global South, India-Brazil renewable energy cooperation has steadily deepened their collaboration. India's approach is shaped by both normative commitments—such as the Sustainable Development Goals (SDGs)—and pragmatic considerations including economic opportunities and technological complementarity. Brazil's response, in turn, reflects a convergence of interests in using renewable energy as a tool for sustainable development and energy security.

This paper contributes two keyways. First, it highlights the geo-economic constrains and possibilities influencing India's engagement in LAC region. Second, it underscores how both countries use existing international institutions not to challenge the Western-led system outright, but to advance national interests within it. In this context, renewable energy cooperation between India and Brazil serves as a vehicle for a pragmatic and interest driven South-South diplomacy that reflects the complexities of the current polarized world order.

Keywords: renewable energy, climate change, strategic partnership, India, and Brazil, emerging powers

¹Shuichiro Masukata is an Associate Professor at the faculty of law, Keio University, Japan. He received his Ph.D. in International Relations from Sophia University, Japan. He was a visiting researcher at the International Relations Institute, the University of São Paulo, Brazil, and the Faculty of Political Science, the University of the Andes, Colombia. From 2020 to 2025, he was a lecturer and associate professor at Tokyo University of Foreign Studies, Japan. mail address: <u>s-masukata@keio.jp</u>.

Introduction: India's Renewable Energy Diplomacy and Brazil's Response from Margins to Strategic Depth

In the context of a polarized and fragmented global order, emerging powers are recalibrating their foreign policy strategies to balance normative ambitions with economic and geopolitical pragmatism (Acharya, 2018). As two prominent actors in the emerging powers, India and Brazil have increasingly engaged with one another on issues of renewable energy and sustainable development. While India has proactively integrated renewable energy into its diplomatic toolkit, Brazil's response has reflected a complex interplay of domestic political transitions, strategic interests, and institutional alignments.

At the multilateral level, Brazil has responded positively to India's initiatives through collaborative engagement in platforms such as BRICS, IBSA, and the G20. These forums have allowed both countries to jointly advocate for the reform of international governance structures and to articulate shared climate and development agendas. Brazil's participation in these institutions demonstrates an alignment with India's diplomatic emphasis on sustainable development and renewable energy, enabling Brazil to reinforce its own regional and global ambitions (Vazquez 2019).

Bilateral relations have similarly evolved, with India's diplomatic outreach prompting Brazil to explore joint initiatives in areas such as biomass and solar energy, particularly aimed at reducing greenhouse gas (GHG) emissions (Mousinho 2021). However, despite growing policy convergence, existing academic literature has largely emphasized economic and trade relations, leaving the dimension of environmental and renewable energy cooperation underexplored.

This paper seeks to address this gap by analyzing how Brazil's domestic political contexts and policy shifts have shaped its engagement with India's renewable energy diplomacy. To this end, the study adopts a process tracing methodology to examine the evolution of India- Brazil energy relations, focusing on the interaction between normative agendas, economic pragmatism, and external geopolitical factors such as China's growing influence in Latin America.

The analysis is structured around three distinct periods that characterize Brazil's diplomatic posture toward India:

- 1. Diplomatic distance (2009–2016): A period of limited engagement and divergent strategic priorities.
- Conservative resonance and strategic caution (2016–2022): Under more conservative administrations, selective convergence with India's energy diplomacy occurred, shaped by economic constraints and ideological affinities.

3. Renewed Alignment and strategic deepening (2023–2025): Recent political transitions in Brazil have fostered deeper strategic ties with India, particularly in the renewable energy sector.

This study makes two key contributions. First, it highlights the importance of geoeconomic complementarities—India's technological capabilities and Brazil's natural resource base—as both constraints and enablers of bilateral cooperation. Second, it illustrates the adaptive strategies employed by both states to navigate shifting domestic political landscapes and regional power dynamics.

By examining the mechanisms that have enabled consistent, albeit uneven, progress in renewable energy cooperation, the paper offers a more nuanced understanding of South–South renewable energy diplomacy. In doing so, it sheds light on how emerging powers craft strategic partnerships that are at once normative, pragmatic, and system compatible.

The remainder of the paper is structured as follows. Section 2 reviews the existing literature on emerging powers' energy diplomacy and identifies conceptual and empirical gaps. Section 3 applies this framework to analyze India–Brazil energy relations. Section 4 explores Brazil's evolving response to India's renewable energy diplomacy across three historical phases. Section 5 discusses the political and institutional factors influencing each period of engagement. The paper concludes with theoretical and empirical implications for emerging power cooperation in the context of global climate governance.

2. Motivation and Renewable Strategies for Emerging Powers in a Polarized and Divided World Order

2.1 Theoretical Context: Cooperation and Energy Diplomacy

Existing scholarship on international cooperation and diplomacy (Keohane 1984; Martin 1993) provides a useful analytical lens for understanding emerging powers' strategic behavior during periods of global crisis. Within this framework, cooperation is broadly understood as a mutual adjustment of national policies through institutional dialogue and negotiation. Recent studies emphasize the rise of South-South cooperation, particularly among emerging powers such as India, Brazil, and South Africa, as a strategic response to global power asymmetries and the limitations of traditional North-South engagement (Stuenkel 2019; Mulnherjee and Arkalhi, 2024).

This reorientation is evident in energy and climate diplomacy, where emerging economies increasingly leverage their geopolitical position to pursue both national interests and global public goods (Wigell, et al.2019). For instance, the formation of groupings such as IBSA and BRICS reflects not just a desire for reform in global governance but also a commitment to sustainable development and renewable energy transitions.

2.2 India–LAC Relations: political and economic dimensions

Historically, India's relations with Latin American and Caribbean (LAC) countries have been characterized as peripheral and low in strategic salience (Dominguez 2023). However, beginning in the early 2000s, these ties began to acquire greater strategic relevance due to structural transformations in the international system—such as the rise of multipolarity and China—alongside domestic political realignments and evolving dynamics in global energy markets (Ellis and Evans 2014).

This shift can be understood through three key dimensions: political, economic, and institutional. First, the political dimension. Between 2004 and 2014, under the United Progressive Alliance (UPA) government, India adopted a more active and pragmatic foreign policy toward Latin America (Domingues, 2023). This reflected a broader strategic orientation of "multi-alignment," whereby India engaged with diverse global partners to enhance its international standing without being tied to any single geopolitical bloc (Tripathi,2020). Within this framework, multilateral platforms such as BRICS played a crucial role. India's participation in these forums, particularly alongside Brazil, provided avenues for advancing shared climate agendas and promoting principles such as "common but differentiated responsibilities" in global climate governance (Dawnie and Williams 2018; Da Conceição et al, 2019). These platforms also opened space for South–South cooperation in renewable energy, enabling emerging powers to develop alternatives to Western-led initiatives (Duggan, et al. 2022).

Second, the economic dimension. Scholars have noted that India's engagement with the LAC region has been driven predominantly by economic motivations, with relatively limited focus on environmental or energy-related cooperation (Heine and Seshasayee 2021). In contrast to China's state-centric, large-scale investments in infrastructure and extractive sectors, India's approach has been more decentralized, cautious, and private sector-led. It has involved diverse stakeholders across sectors such as pharmaceuticals, IT, and energy.

Trade data reflects this growing economic engagement. India's trade with LAC countries expanded at a faster pace than with traditional partners such as the United States,

China, and the United Kingdom (Table 1, 2). This growth was facilitated by targeted economic diplomacy, including preferential trade agreements with MERCOSUR and bilateral trade missions. Trade with Brazil increased significantly. Notably, even the 2008–09 global financial crisis did not substantially disrupt this trend, as trade volumes recovered swiftly in subsequent years (Dominguez 2023).

	2004	2008	2009	2010	2014	2020	Index 2004-2014
Argentina	156	381	247	376	498	740	320
Bolivia	4	10	8	14	69	85	1858
Brazil	561	3,194	1,760	3,670	6,973	3,676	1243
Chile	99	418	254	482	617	738	621
China, Mainland	4,178	10,537	10,155	17,519	13,507	9,585	323
Colombia	267	411	361	509	1,129	833	422
Costa Rica	17	39	29	52	94	112	548
Cuba	6	37	22	24	36	20	565
Dominican Rep.	18	55	48	79	139	189	761
Ecuador	20	94	110	113	298	195	1503
El Salvador	8	17	13	20	60	76	763
Guatemala	33	92	77	109	222	300	676
Guyana	6	13	14	16	23	24	385
Haiti	14	44	34	59	73	89	537
Honduras	18	85	46	58	162	139	886
Mexico	330	700	576	767	2,920	3,049	884
Nicaragua	10	53	19	27	65	73	666
Panama	54	116	86	102	272	156	502
Paraguay	11	42	32	39	99	149	878
Peru	59	408	213	400	755	703	1283
Trinidad and Tobago	26	378	192	58	106	71	415
United Kingdom	3,415	6,989	6,183	6,422	9,677	7,790	283
United States	12,839	22,418	18,280	23,611	42,496	49,340	331

Table 1 India's exports to partner countries, 2004-2020, FOB (Million, U.S. dollars)

Uruguay	22	70	46	79	218	98	994
Venezuela	57	160	190	155	238	761	421
World	75,045	195,055	165,188	222,907	317,719	275,600	423

Resource: Domingues (2023),787

Table 2. India's imports to partner countries, 2004-2020, CIF (Million, U.S. dollars)

	2004	2008	2009	2010	2014	2020	Index 2004- 2014
Argentina	518	603	608	1034	2015	2611	389
Bolivia	1	6	5	6	2	1020	362
Brazil	650	1166	3007	3244	5535	3192	852
Chile	296	1791	997	1573	3182	854	1075
China, Mainland	1656	5228	4971	7794	5804	14563	350
Colombia	13	23	341	774	3554	1153	27145
Costa Rica	32	61	92	92	185	39	580
Cuba	2	15	1	1	1	70	68
Dominican Rep.	2	10	9	15	85	201	3461
Ecuador	18	60	62	171	1003	317	5569
El Salvador	2	6	6	5	8	4	508
Guatemala	1	4	4	4	17	21	2095
Guyana	8	11	7	11	9	10	113
Haiti	1	2	2	1	1	12	165
Honduras	0	4	5	23	26	10	16677
Mexico	78	1774	978	990	3449	3061	4431
Nicaragua	0	1	0	0	2	5	942
Panama	76	266	349	283	94	29	124
Paraguay	2	0	5	5	57	17	2509
Peru	32	298	100	212	563	1382	1755
Trinidad and Tobago	10	91	147	80	36	178	288
United Kingdom	3,382	6,251	3,979	5,181	4,785	4723	141

United States	5981	18628	16644	19136	21234	26592	365
Uruguay	6	17	14	17	21	139	355
Venezuela	4	4116	1837	4990	13199	2367	37291
World	99815	321399	257649	350780	460501	368030	461

Resource: Domingues (2023),788.

Although bilateral trade peaked around 2014 and subsequently declined due to falling commodity prices and domestic instabilities in parts of Latin America, by 2020 the literature identifies signs of resilience and renewed momentum. India's diversified commercial partnerships, long-term economic complementarities, and sustained diplomatic outreach have been seen as critical in laying the groundwork for more integrated cooperation in emerging sectors, including renewable energy (Jayaram 2021).

Simultaneously, political and economic shifts within key LAC countries—especially Brazil—created new windows of opportunity for cross-regional collaboration. The literature emphasizes a mutually reinforcing dynamic in this period: political will at the leadership level catalyzed engagement, which was then institutionalized through business networks and frameworks such as free trade agreements and energy cooperation dialogues (Hochstetler and Cristina 2019; Dominguez 2023).

2.3 Identified Research Gaps and Challenge

While the existing literature provides valuable insights into the broader context of South-South cooperation and India–LAC relations, several critical gaps persist in our understanding of the evolving India–Brazil renewable energy partnership. The bilateral dimension of renewable energy diplomacy between India and Brazil remains notably underexplored. Among such few studies, Mousinho (2021) stands out as a pioneering work that provides a multifaceted analysis of how two major emerging powers, India and Brazil, have engaged in the context of climate and energy transitions, including the launch of joint projects. Situated at the intersection of international relations, energy policy, and development economics, the study is also deeply connected to practical themes of international cooperation and climate governance.

However, these previous studies also leave several issues unresolved. First, it does not sufficiently explain why certain outcomes or limitations in cooperation emerged, highlighting the need for a more refined theoretical perspective. Much of the academic focus has centered on either multilateral cooperation, particularly within platforms such as BRICS and IBSA—or general economic relations, with limited attention to the specific

policy dialogues, institutional arrangements, and strategic decisions that define the bilateral relationship (Stuenkel, 2020). This lack of granular analysis obscures the dynamics through which renewable energy cooperation has developed—or failed to develop—on a state-to-state basis. Additionally, South-South cooperation is often assumed to be "egalitarian," in reality, asymmetries between actors may exist; the study does not clearly address how such imbalances are treated (Bernal-Meza and Li,2020).

Second, there is insufficient integration of normative and pragmatic considerations in the analysis of energy diplomacy. Existing studies tend to treat normative goals such as the Sustainable Development Goals (SDGs) as secondary to economic or technological interests. However, Keohane and Victor (2016) and Hochstetler and Milkoreit (2015) argue, sustainable energy transitions among emerging powers are shaped not only by market dynamics but also by evolving norms of environmental responsibility, institutional legitimacy, and development equity. The absence of a comprehensive analytical framework that incorporates both values-based motivations and material interests limits our ability to fully understand strategic decision-making in renewable energy diplomacy.

Third, and most critically, the literature often underestimates the impact of domestic political transitions and geopolitical shifts on bilateral renewable cooperation. Since energy cooperation is a field highly sensitive to political risks, the analysis should also consider how changes in administration or foreign policy orientations might affect bilateral cooperation. Brazil's foreign policy orientation has shifted considerably in response to internal political dynamics—from center-left administrations prioritizing environmental and social justice, to conservative governments with a more market-oriented and at times climate-skeptical approach (Pereira and Viola 2024). These shifts have influenced Brazil's receptiveness to India's renewable energy diplomacy and affected the continuity and coherence of joint initiatives. At the same time, external factors—most notably the expanding influence of China in both South Asia and Latin America—have created strategic pressures and incentives that further complicate India–Brazil engagement (Gardini2021).

Considering these gaps, this study argues for a more nuanced and historically grounded analysis of India–Brazil renewable energy cooperation. Diplomacy on the interaction of political, normative, and economic factors across different historical periods, the research seeks to explain how and why renewable energy diplomacy between the two countries has evolved over time, and what this evolution reveals about the broader challenges of climate governance among emerging powers.

3. Analytical Framework and Research Design: Tracing India–Brazil Renewable Energy Relations

3.1 Research Design and Methodology: Process Tracing

This study adopts a process tracing approach to examine the evolution of Brazil's engagement with India's renewable energy diplomacy. Process tracing is particularly well-suited to uncovering the causal mechanisms that link specific political events, institutional developments, and policy outcomes over time (George and Bennett 2005). This method allows for a historically contextualized and theoretically informed account of how bilateral relations unfold across different political regimes and international contexts.

The method also analyzes key turning points, decisions, and institutional shifts to identify the drivers and constraints behind Brazil's changing cooperation with India on renewable energy. Rather than merely describing policy shifts, it seeks to uncover the political logic and strategic calculations shaping them. This makes it an approach particularly well-suited to emerging powers, where informal alignments often carry more weight than formal treaties.

In line with this methodology, this study makes use of a range of valuable sources to substantiate its findings. The primary data sources include official government documents and joint declarations (e.g., BRICS and IBSA communiqués, energy MOUs), policy speeches by Indian and Brazilian leaders, secondary literature and expert analyses on India–Brazil relations, and trade and investment data in the renewable energy sector.

3.2 Temporal Periodization: Three Phases of India–Brazil Renewable Energy Engagement

To capture the dynamic nature of bilateral energy diplomacy, the study divides the India–Brazil relationship into three distinct periods. Each phase reflects shifts in both domestic political conditions and international strategic alignments that have shaped Brazil's responsiveness to India's initiatives in renewable energy:

The First is the Period of Diplomatic Distance (2009–2016). This phase was characterized by limited bilateral engagement in renewable energy, despite participation in multilateral forums such as BRICS. Brazil's domestic focus on internal development and India's prioritization of other regions meant that cooperation remained largely symbolic. Institutional dialogues on climate existed but were not matched by concrete projects or technological partnerships.

- Brazilian leadership: Lula da Silva (until 2010), Dilma Rousseff
- Indian leadership: Manmohan Singh (until 2014), Narendra Modi
- Notable feature: High-level rhetoric without implementation; Brazil focused more on ties with the U.S., EU, and China during this time.

The Second is Conservative Resonance and Strategic Caution (2016–2022). Under the conservative government of Jair Bolsonaro, Brazil's foreign policy saw a reorientation toward market liberalism and away from traditional environmentalism. However, a convergence of economic pragmatism with India—especially regarding diversification of energy sources and green technologies—led to cautious collaboration in areas like biofuels and solar energy.

- Brazilian leadership: Jair Bolsonaro
- Indian leadership: Narendra Modi
- Notable feature: Conservative ideological affinity facilitated diplomatic dialogue, but climate priorities remained subordinated to economic concerns.

The Third is Renewed Alignment and Strategic Deepening (2023–2025). With the return of Luiz Inácio Lula da Silva to power and India's continued climate leadership in the Global South, this period marks a renewed momentum in bilateral cooperation, particularly on sustainable development and green energy transitions. The two countries have shown growing interest in aligning their climate strategies, including potential joint ventures in bioenergy, solar power, and institutional coordination in climate finance.

- Brazilian leadership: Lula da Silva (from 2023)
- Indian leadership: Narendra Modi
- Notable feature: Complementary energy strategies and shared commitment to SDGs have revitalized climate diplomacy.

3.3 Conceptual Framework: Norms, Pragmatism, and Systemic Constraints

The analytical framework integrates three interrelated dimensions to explain the evolution of India–Brazil renewable energy cooperation as illustrated in Graph 1. First is Normative Alignment Shared commitments to sustainable development, energy justice, and global climate governance. Multilateral advocacy through BRICS, IBSA, and G20. Second is Economic and Technological Pragmatism and Complementary capabilities: Brazil's biomass and hydropower potential meets India's solar and wind technology

expertise. Trade and investment flows, especially in clean energy sectors. Third is Systemic and Political Constraints: Domestic leadership changes and their impact on foreign policy orientation. External pressures from China, the U.S., and global market volatility. Together, these dimensions help explain not only why cooperation fluctuates, but also how it persists despite systemic fragmentation and political uncertainty.

Graph.1 Conceptual framework



Resource: authors' elaboration

4. Brazil's Response to India's Renewable Energy Diplomacy and the Evolving Strategic Partnership

This section traces the evolution of Brazil's response to India's renewable energy diplomacy across three distinct periods. These are: (1) the "Distance" period (2009–2016), marked by cautious and limited engagement; (2) the "Conservative Resonance" period (2016–2022), characterized by pragmatic convergence amid ideological shifts; and (3) the "renewed alignment" period (2023–2025), signifying a renewed strategic partnership in response to global polycrisis—such as climate change, geopolitical polarization, and economic inequality.

1. The "Distance" period (2009–2016)

4.1.1. The Lula First and second Administration (2003–2009): Initial Engagement Amid Cautious Optimism

During the Lula administration, Brazil responded positively yet cautiously to India's growing diplomatic outreach. Brazil, riding the wave of the Pink Tide and focused on asserting regional leadership and South-South solidarity, saw India as a natural partner given their shared status as large, democratic emerging economies with complementary development needs. Lula's government welcomed India's emphasis on strategic autonomy and multilateral cooperation, especially through forums such as BRICS and IBSA.

The formal upgrade of Brazil-India relations to a strategic partnership in 2006 was well-received in Brasília, viewed as a timely diplomatic move to diversify Brazil's alliances beyond traditional Western powers and China. Brazil appreciated India's resource-driven economic growth model and its pragmatic, cautious approach to global engagement, which aligned with Brazil's own pursuit of multipolarity and reform of global governance institutions (Heine and Seshasayee 2021).

In energy and climate diplomacy, Brazil responded favorably to India's initiatives, particularly in renewable energy and climate change mitigation. The formation of the BASIC coalition in 2009, which Brazil co-led with India, was interpreted as a strategic success that elevated Brazil's international profile and underscored the potential of South-South cooperation. The Brazilian government endorsed India's voluntary commitments to emissions reduction as part of a shared normative framework, reflecting mutual respect and trust (Hochstetler and Viola 2012).

The main objective of this memorandum is to encourage and facilitate cooperation in the development and commercial application of solar energy through the evaluation of resources and technologies, identifying the technical and economic potential of this source, and promoting the exchange of information for the development of cooperation in the area. Countries have also committed themselves to identify research institutions, expert organizations, and industry partners to strengthen ties and cooperation in solar energy (Mousinho 2021:92). Thus, cooperation in the solar energy sector was the first cornerstone of climate change cooperation between India and Brazil during the Lula administration.

However, Brazil's response was tempered by structural constraints, including bureaucratic inertia and competing domestic priorities. While Brasília recognized the value of closer India ties, it remained cautious about overcommitting, partly due to uncertainties about India's long-term foreign policy trajectory and limited Indian presence in Latin America beyond Brazil (Singh and Misra 2021)².

4.1.2. The Rousseff Administration (2010–2016.8): Consolidation and Pragmatism amid Shifting Political Landscapes

Under President Dilma Rousseff, Brazil continued to engage India strategically but with a more pragmatic and measured tone. Brazil viewed India's growing assertiveness under the new Modi administration starting in 2014 with cautious interest, appreciating the continuity of India's participation in BRICS and climate diplomacy, yet observing a somewhat more transactional and economic-focused Indian foreign policy. Additionally, the 2010 trilateral Memorandum on Solar Energy Cooperation with India and South Africa (IBSA forum) was welcomed in Brazil as an important institutionalization of renewable energy collaboration, signaling Brasília's commitment to green growth³. Brazil valued India's technological expertise and market potential but also acknowledged challenges in harmonizing institutional frameworks and knowledge exchange.

The year 2015 holds significance for both India and Brazil renewable cooperations in two key respects. First, 7th India–Brazil Joint Commission Meeting was held in New Delhi. Both agreed to intensify cooperation in: Infectious disease research, biotechnology, ICT, renewable energy, space research and highlighted the use of Indian satellite data (RESOURCESAT-2) received by Brazilian ground stations⁴. Second, the 2015 Paris

² India uses strategic partnerships as a national foreign policy strategy in its quest for strategic autonomy in decision-making and follows the maxim of "cautious prudence" (Singh and Misra 2019). Partners have been ranging from major powers, such as the US (2004), the UK (2004), France (1998), Germany (2001), Japan (2006), and Russia (2000), to the wide dispersion of countries such as China (2005), South Africa (1997), and Indonesia (2005). The partners include major emerging powers in the post-Cold War world and, those who, like Brazil, were not oriented by East-West relations during the Cold War. Brazil was the first Latin American country to establish diplomatic relations with independent India, and they have maintained the ties for 70 years (Vasquez 2019).

³ IBSA Forum, "Memorandum of understanding among the government of the republic of India, the government of the federative republic of Brazil and the government of the republic of South Africa of cooperation in the area of solar energy," "23 April 2010. (<u>23042010solarenergy.pdf</u>") (Assessed on 13, June 2025).

 ⁴ <u>7th India-Brazil Joint Commission Meeting (JCM) – Joint Statement and Minutes – New</u>
 Delhi, November 19, 2015 — Ministério das Relações Exteriores

Agreement marked a high point in Brazil's climate diplomacy with India. Brazil welcomed India's ambitious emission intensity targets and its vocal support for "common but differentiated responsibilities," viewing this as a sign of shared responsibility among emerging powers. Brazilian policymakers saw the alignment in climate goals as an opportunity to deepen bilateral cooperation on renewable energy and forest conservation, though political and economic turbulence at home—exacerbated during Rousseff's later years—tempered momentum (Solveig 2018).

In sum, Brazil's response to India's diplomacy during this period can be characterized by steady engagement combined with strategic caution. While Brasília appreciated India as a valuable partner within multilateral coalitions, it remained mindful of domestic political instability, institutional gaps, and the need for a clearer, long-term bilateral strategic vision. This cautious but constructive stance reflected Brazil's broader balancing act in an increasingly complex global order marked by US-China rivalry and shifting alliances.

4.2 the "Conservative Resonance" period (2016–2022)

4.2.1 Temer administration (2016.9–2018): Pragmatic Adjustment in Response to India's Proactive Diplomacy

Following the political upheaval and impeachment of President Dilma Rousseff in 2016, the elevation of Vice President Michel Temer to the presidency marked a shift from a leftist to a center-right government. Brazil's reaction to India's diplomatic overtures during this period was shaped by the pressing need to overcome economic stagnation and revive growth through pragmatic partnerships, including with emerging powers such as India.

First, Temer welcomed Prime Minister Modi's active foreign policy posture, perceiving India's expanding interest in Latin America as an opportunity to diversify trade and investment sources beyond traditional partners. The Brazilian government viewed India's strategic push to secure alternative raw materials and markets favorably, aligning well with Brazil's macroeconomic agenda aimed at economic recovery. The bilateral meeting between Temer and Modi in Goa underscored Brazil's recognition of India's rising global profile and a shared interest in enhancing economic and trade cooperation.

Second, Temer's administration responded positively to India's initiatives around sustainable development and climate diplomacy, which gained momentum following the 2015 Paris Agreement. Brazil perceived India's launch of projects such as "Sanatan Bharat (Sustainable India)," the Coalition for Disaster Resilient Infrastructure, and the International Solar Alliance as complementary to Brazil's own climate ambitions. These efforts aligned with Brazil's strategy to integrate national development goals with the Sustainable Development Goals (SDGs), fostering inclusive South-South cooperation India strengthened its involvement with Brazil's climate change policies by launching "Sanatan Bharat (Sustainable India)," the Coalition for Disaster Resilient Infrastructure, and the International Solar Alliance, which includes the "2030 Agenda for Sustainable Development." In the spirit of South-South Cooperation, for realizing the 2030 Agenda, India supports developing countries through \$ 150 million India-UN Development Partnership Fund (Sustainable Development Goal Knowledge Platform 2020).

Third, Brazil acknowledged India's growing role as a development partner, especially in renewable energy and disaster resilience sectors. The Temer administration regarded India's \$150 million India-UN Development Partnership Fund as a significant contribution to capacity building in developing countries, including Brazil. Brazilian policymakers valued the tangible benefits from increased Indian foreign direct investment, particularly in the energy sector, as reinforcing Brazil's climate and economic priorities.

The Temer government also recognized India's diplomatic balance in managing China's influence in the region, which resonated with Brazil's own cautious engagement with Beijing under the Belt and Road Initiative (BRI). Brazil noted India's strategic interest in securing diversified energy supplies and markets, appreciating the complementarity of economic and geopolitical goals.

In sum, Brazil's response to India's diplomacy during the Temer administration was characterized by pragmatic openness and strategic accommodation. Despite domestic political challenges, Brasília prioritized fostering robust bilateral economic ties and supporting multilateral climate cooperation. Brazil's receptiveness to India's active foreign policy initiatives reflected a growing acknowledgment of India as a key emerging power whose partnership could contribute significantly to Brazil's sustainable development and economic recovery.

4.2.2. Bolsonaro administration (2019–2022): Brazil's Response to India's Diplomacy Amid Ideological Shifts

The election of Jair Bolsonaro in 2018 introduced a conservative, nationalist government in Brazil, marking a pronounced ideological shift from previous administrations. Bolsonaro's skepticism toward multilateral climate frameworks and environmental protections, especially regarding the Amazon, created potential points of friction in Brazil's international engagement (Pereira and Viola 2024). However, Brazil's response to India's diplomatic overtures during this period demonstrated a pragmatic and economically driven approach.

Despite Bolsonaro's ideological stance, Brazil recognized India's sustained commitment to global climate initiatives and renewable energy development as strategically valuable. Brazilian policymakers viewed India's continued leadership of the International Solar Alliance (ISA) and active engagement in multilateral forums like BRICS as opportunities to maintain constructive dialogue and technical cooperation. This pragmatic stance reflected Brazil's interest in leveraging India's growing expertise and investments in renewable energy to support Brazil's own economic and energy security goals (Shidore and Busby 2019).

First, in January 2020, India and Brazil signed an Action Plan to strengthen their Strategic Partnership amid the COVID-19 Pandemic. This plan outlined concrete commitments not only in political, strategic, and military cooperation, but also in key areas such as agriculture and energy, as well as science, technology, environment, health, and space⁵.Brazil's reaction to India's diplomatic efforts was thus characterized by a willingness to compartmentalize ideological differences in favor of practical collaboration. The Bolsonaro administration prioritized trade and investment ties, particularly in renewable energy sectors such as solar, wind, and bioenergy, recognizing these as critical to stimulating domestic growth amid economic challenges. Brazil welcomed Indian technology transfers and joint ventures as enhancing its capacity to diversify energy sources and promote sustainable development.

Second, Brazil appreciated India's balanced foreign policy posture, which sought to expand global partnerships without antagonizing China, a key Brazilian partner. This diplomatic pragmatism resonated with Brazil's own efforts to navigate a complex geopolitical environment while pursuing national interests.

In sum, Brazil's response to India's diplomacy from 2016 to 2022 reflected a strategic adaptation: despite political and ideological divergences under Temer and Bolsonaro, Brazil actively engaged with India in renewable energy cooperation and multilateral platforms. This response underscored a maturing bilateral relationship where economic

 ⁵ <u>Action Plan to Strengthen the Strategic Partnership between Brazil and India – January</u>
 25, 2020 — Ministério das Relações Exteriores

imperatives and energy security concerns enabled sustained and deepened collaboration beyond political shifts.

4.3 The Renewed Alignment Period (2023–present): Lula's Third Term and the Revitalized Partnership

Brazil's response to India's renewable energy diplomacy has evolved from cautious engagement to strategic partnership, reflecting a growing recognition of India as a key factor in shaping the Global South's role in the emerging world order. Rather than perceiving India's initiatives as competitive or hegemonic, Brazil increasingly sees them as complementary to its own developmental and geopolitical objectives.

Compared to Lula's first and second administrations (2003–2010), which laid the groundwork for Brazil's international engagement and sustainable development agenda, the third Lula administration places greater emphasis on global climate leadership and strategic partnerships. While the earlier terms focused on consolidating domestic social and environmental reforms alongside South–South cooperation, Lula's renewed government actively seeks deeper collaboration with India on renewable energy technologies and multilateral climate governance. This shift illustrates Brazil's transition from a regionally focused actor to a proactive participant in global energy transition dialogues, with India as a key partner⁶.

Initially, Brazil maintained a degree of distance from India's energy diplomacy, particularly during the early years of the International Solar Alliance (ISA), to which Brazil belonged but with limited engagement. However, recent geopolitical shifts—including the weakening of traditional North–South leadership, growing energy insecurity, and the accelerating climate crisis—have prompted Brazil to reconsider the value of deepening South–South partnerships⁷. Under Lula's renewed presidency, this strategic recalibration has gained momentum. Brazil's current response to India's diplomacy since 2023 is shaped by several interlinked motivations:

First, technological and economic complementarity. Brazil recognizes India's

⁶ Indian Prime Minister Modi and Brazilian President Lula met on September 10, 2023, in New Delhi during the G20 Summit and issued a joint statement to strengthen India–Brazil relations. See. Ministry of External Affairs Government of India, <u>India-Brazil Joint Statement</u> September 10, 2023.

⁷ Brazil became a full member of the International Solar Alliance (ISA) in February 2023 (<u>Brazil becomes full-member of International Solar Alliance – ThePrint – ANIFeed</u>). Additionally, Brazil was formally welcomed during the Sixth Session of the ISA Assembly, as documented in the ISA Newsletter (<u>ec8ee564ea32106073d8b10da43ade.pdf</u>). (Accessed on 13 June 2025).

advancements in cost-effective solar technologies, scalable off-grid systems, and renewable infrastructure financing as valuable assets for its own energy transition, particularly in underserved regions such as the Amazon and Northeast Brazil.

Second, multilateral synergy. India and Brazil cooperate in forums such as BRICS, the G20, and IBSA not only in climate negotiations but also in promoting institutional reform within organizations like the UN and the World Bank. Brazil increasingly aligns with India's vision of multipolarity, which seeks to amplify emerging voices within existing global governance frameworks.

Third, strategic autonomy and diplomatic balance. Brazil sees cooperation with India as a means of diversifying its strategic partnerships beyond China and the traditional Western powers. This reflects Brazil's long-standing preference for strategic autonomy and a balanced foreign policy.

Fourth, shared normative values. Both countries emphasize climate justice, inclusive development, and equitable access to renewable energy (Joshi, 2014; Torres et al 2020). Brazil regards India not only as an economic partner but also as an ideological ally in advocating for a just energy transition that considers historical responsibilities and developmental disparities.

Through high-level visits, joint statements, and institutional cooperation in the areas of energy, innovation, and sustainability, Brazil is increasingly positioning itself as a responsive and constructive partner to India's renewable energy diplomacy. While domestic political dynamics in both countries may influence the pace and tone of cooperation, the structural drivers—mutual benefit, global legitimacy, and geopolitical diversification—provide a solid foundation for sustained partnership.

In sum, Brazil's evolving response is not merely reactive, but strategic. It reflects a broader understanding of renewable energy not only as an environmental concern but also as a geo-economic and diplomatic tool to navigate a polarized global order in partnership with a like-minded emerging power.

5. Discussion

Brazil's response to India's renewable energy diplomacy has evolved in tandem with shifting domestic political contexts and global geopolitical trends. Each administration, whether cautious, pragmatic, or proactive, has contributed to the gradual deepening of bilateral energy cooperation. These patterns reveal the dynamic nature of South-South diplomacy in a polarized world order and set the stage for examining the underlying strategic and institutional mechanisms driving these shifts, which will be the focus of the next section.

The empirical discussion of Brazil's case in this paper illustrates the country's evolving responses to India's renewable energy diplomacy within the broader dynamics of their strategic partnership. As summarized in Table 3, the trajectory of Brazil's response reflects a broader trend toward selective but deepening interdependence among emerging powers. Across the Singh and Modi administrations in India and through shifting political leaderships in Brazil, Brasília's reactions have reflected a pragmatic balance between political ideology and economic necessity.

First, under the Workers' Party (PT) governments, Brazil welcomed India's engagement, viewing it as an opportunity to align with a fellow emerging power committed to sustainable development and multilateral energy and climate agendas. Brazil responded positively to India's proactive diplomacy in forums such as COP15, embracing bilateral and plurilateral initiatives that reinforced its own domestic climate objectives. Although the Lula and Rousseff administrations engaged diplomatically, concrete cooperation remained limited highlighting the gap between normative alignment and institutional implementation.

Second, during the Temer and Bolsonaro administrations, Brazil demonstrated a more overtly pragmatic approach. Regardless of ideological divergence, Brasília prioritized economic and technological gains from India's renewable energy diplomacy. India's initiatives were seen as complementary to Brazil's development goals, especially amid fiscal constraints and geopolitical recalibration. The continued engagement under conservative governments indicated a growing strategic awareness that partnership with India served not only bilateral interests but also broader imperatives of energy security and sustainable growth.

Third, under the renewed Lula administration (2023–present), Brazil has reaffirmed its commitment to multilateralism, climate justice, and South-South cooperation—principles that resonate with India's global stance. Lula's return marked a reinvigorated diplomatic posture, with Brazil actively engaging India in forums such as the International Solar Alliance and BRICS. These efforts reflect a strategic recalibration: Brazil now views India not only as a partner in renewable energy but also as a co-leader in shaping an inclusive and equitable global energy transition.

Conclusion: Brazil's Response to India's Renewable Energy Diplomacy in Emerging Power Relations

Emerging powers seek to establish alternative networks that diverge from those of the "West," not necessarily by promoting Western values such as liberal democracy or human

rights, but through pragmatic cooperation grounded in development goals, strategic autonomy, and mutual benefit. This paper has shown that such cooperation is shaped not only by shared geopolitical considerations, but also by domestic political and economic dynamics. From this analysis, three key implications emerge.

First, Brazil's response to India's renewable energy diplomacy reflects a flexible and adaptive engagement strategy. While the intensity of bilateral engagement varied across successive Brazilian administrations, India was consistently regarded as a valuable partner in advancing Brazil's goals for economic recovery, energy diversification, and environmental stewardship. This highlights that Brazil's approach was guided less by ideological alignment and more by pragmatic convergence—particularly in global governance platforms such as BRICS, IBSA, and the International Solar Alliance.

Second, by foregrounding Brazil's perspective, this study contributes to a more nuanced understanding of how emerging powers navigate the challenges of energy and climate governance. Brazil's evolving engagement with India illustrates how domestic priorities are balanced with the strategic opportunities of South-South cooperation. This case underscores the ways in which emerging powers respond to global polycrises, by pursuing flexible, interest-based partnerships that enhance their agency in the international system.

Third, the findings of this paper offer insights that extend beyond the India–Brazil relationship. Similar structural dynamics are likely to be observed in Brazil's relations with other emerging economies, such as Mexico—which plays a pivotal role in Latin America—and South Africa, which, despite ongoing domestic challenges, actively promotes energy transition and democratic governance within multilateral forums such as BRICS+. These parallels suggest the need for broader comparative research on how middle powers in the Global South construct issue-based partnerships to shape the contours of global energy and climate governance. This study thus advances an understanding of emerging power diplomacy and highlights the evolving role of renewable energy as a strategic tool in South–South relations.

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Table3: Brazil's Response to India's Climate and Renewable Energy Diplomacy under Five Administrations (elaborated by author)

Administration	Ideological		Key				
(Period)	Orientation	Attitude toward India	Cooperation	Focus of Cooperation	Key Characteristics		
(1 61100)	Onentation		Platforms				
Lula 2003–2011	Left-wing, progressive	Proactive and welcoming	COP15, IBSA, BRICS	Sustainable development, multilateral climate diplomacy	Emphasized South-South cooperation with a fellow Global South leader		
Rousseff (2011–2016.8)	Left-wing, technocratic	Viewed India as a complementary partner	BRICS, IBSA COP21	Alignment with domestic climate goals	Maintained a constructive and cooperative diplomatic stance		
Temer 2016.9–2018	Center-right, conservative	Pragmatic, economically focused	BRICS	Technological and economic benefits	Continued cooperation with a shift toward economic pragmatism		
Bolsonaro 2019–2022	Right-wing, climate-skeptical	Passive in policy but maintained cooperation	BRICS (mainly symbolic)	Economic and technological collaboration	Despite domestic environmental rollback, prioritized strategic benefits in bilateral ties		
Lula 2023–present	Left-wing, multilateralist	Renewed emphasis on Global South cooperation	BRICS+, G20, COP28-30, IBSA	Climate justice, energy transition, Global South leadership	Reinvigorated climate diplomacy and South-South engagement; aligned with India on sustainable development and multilateral reform		