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The Climate Emergency *versus* the Right to Development: Where do Brazil-China Relations Stand?

Emergência Climática versus Direito ao Desenvolvimento: como situar as relações Brasil-China?

Emergencia Climática versus Derecho al Desarrollo: ¿cómo analisar las relaciones Brasil-China?

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Abstract

In this paper, my main argument is that a critical understanding of Brazil-China relations challenges Brazil's government to redefine new paths for its own transition towards more sustainable development policies, on the one hand, and for both Brazil and China to integrate climate-related criteria in their strategic partnership, on the other hand. Based on the review of secondary data, official reports and available bibliography, the paper is structured around three main sections: (i) The context: climate emergency and its implications for development in Brazil; (ii) The focus: Brazil-China evolving relations in the twenty-first century; and (iii) The discussion: rejuvenating the Brazil-China strategic partnership.

Keywords: Climate emergency, development, sustainability, Brazil-China relations.

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Meu principal argumento neste artigo é de que uma compreensão crítica das relações Brasil-China desafia o governo brasileiro a redefinir novos caminhos para sua própria transição em direção a políticas de desenvolvimento mais sustentáveis, por um lado, e para que tanto o Brasil quanto a China integrem critérios relacionados ao clima em sua parceria estratégica, por outro lado. Com base na revisão de dados secundários, relatórios oficiais e bibliografia disponível, o artigo é estruturado em torno de três seções principais: (i) O contexto: emergência climática e suas implicações para o desenvolvimento no Brasil; (ii) O foco: a transformação das relações Brasil-China no século XXI; e (iii) A discussão: renovando a parceria estratégica Brasil-China.

Palavras-chave: Emergência climática, desenvolvimento, sustentabilidade, relações Brasil-China.

Resumen

En este artículo, mi argumento principal es que una comprensión crítica de las relaciones entre Brasil y China desafía al gobierno brasileño a redefinir nuevos caminos para su propia transición hacia políticas de desarrollo más sostenibles, por un lado, y a que tanto Brasil como China integren criterios relacionados con el clima en su asociación estratégica, por el otro. A partir de la revisión de datos secundarios, informes oficiales y bibliografía disponible, el artículo se estructura en torno a tres secciones principales: (i) El contexto: la emergencia climática y sus implicaciones para el desarrollo en Brasil; (ii) El enfoque: la evolución de las relaciones entre Brasil y China en el siglo XXI; y (iii) La discusión: la renovación de la asociación estratégica entre Brasil y China.

Palabras clave: Emergencia climática, desarrollo, sostenibilidad, relaciones Brasil-China.

Introduction

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Brazilian presidents have since the 1990s considered China-Brazil bilateral relations (particularly trade) a key dimension of Brazil's foreign policy. In 1995, Fernando Henrique Cardoso paid an official visit to Beijing; Lula da Silva even mentioned China in his inaugural address in 2003; Dilma Rousseff made her first international trip to Beijing in 2011, and the BRICSs group quickly became one of her top economic priorities. The Bolsonaro administration, between 2019 and 2022, represented a paradoxical moment in Brazil-China bilateral relations:

trade-wise the agribusiness export companies would be an important pro-China economic sector and political lobby in the Executive and Legislative branches of the federal state; however, diplomatically many of Bolsonaro's high official made disavowing public statements about China that in fact showcased ethnocentric, uninformed and discriminatory visions of Chinese history and culture in the *longue durée* and its recent economic accomplishments. The new Lula administration has reestablished the strategic dimension of Brazil's foreign relations with China: Xi Jinping and Lula da Silva met in Beijing on 14 April 2023, having placed climate change in the spotlight of Brazil-China bilateral relations.

Multilaterally, the two countries have important responsibilities, although they play asymmetric roles in the United Nations climate negotiations, mainly through the BASIC coalition, involving Brazil, South Africa, India and China. Both China (1st) and Brazil (7th) are among the world's major emitters of greenhouse gases (GHG) in absolute terms, even if *per capita* emissions vary widely, with Australia, the United States and Canada having approximately twice the emissions of the European Union and China, and three times those of Brazil in 2020 (Climate Watch 2023). In addition, China is one of the leading economies in energy transition policies (Lo 2021; Meidan 2020). Brazil, whose profile of GHG emissions is closely related to land-use and deforestation, is home to approximately 60% of the Pan-Amazon rainforest; it has become a key player in the fight against deforestation and, due to its economic weight in global meat and grain trade, may eventually play an important role in transition scenarios towards low-carbon agriculture models.

Having this background in mind, this paper aims to analyze the strategic implications of the adoption of climate emergency as a key concept in the field of a more socially and environmentally sustainable development from a Brazilian perspective. The climate emergency here refers to the anthropogenic climate change defined as an interdependent set of natural, social, economic, and political problems that relate to unprecedented severity, scale, and complexity, and all this within a timeframe that constrains short-term policy making and global diplomacy due to long-term planetary effects. The focus of the paper is on the interplay between Brazil's domestic politics and Brazil-China relations in an attempt to understand how trade, investment and foreign policy options may produce challenges for Brazil to redefine new paths for its own development policies, on the one hand, and for both Brazil and China to integrate climate-related criteria in their strategic bilateral relations, on the other hand.

Based on the review of secondary data, official reports and available bibliography, the paper responds to the following research question: what are the main challenges and opportunities posed by the climate emergency to Brazil-China strategic relations? In order to answer this question, I analyze recent international political economy trends and argue that the adoption of sustainability standards due to the climate emergency implies a profound rethinking of the role of the State in development, particularly in Brazil, and the redefinition of economic and political priorities in the strategic partnership between the two countries. The paper is structured around three main sections, followed by concluding remarks: (i) Climate emergency and its implications for development in Brazil; (ii) Brazil-China evolving relations since the foundation of BRICS, here considered as a hallmark in the trajectory of strategic relations between the two countries, both in bilateral and multilateral negotiations; (iii) Proposing policy parameters to rejuvenate the Brazil-China strategic partnership.

The Context: Climate Emergency and Sustainable Development in Brazil

The accelerated loss of biodiversity, increasing deforestation rates, rising emissions of CO2 related to the continuous development of the fossil economy, and the climate emergency are fundamental components of the Anthropocene which have produced intense public debates about the rejuvenated responsibility of the State in development models (Franchini, Viola and Barros-Platiau 2017; Pettifor 2019). The concept of the Anthropocene was coined in 2000 by Paul Crutzen, who had won the Chemistry Nobel Prize in 1995, and by biologist Eugene Stoermer. They proposed to consider humankind a geological force in shaping the functioning of the Earth system (Crutzen and Stoermer 2000). From natural sciences to the humanities and social science research, the debate on the Anthropocene has gained significant critical ground (Chandler, Muller and Rothe 2022).

In the context of the Anthropocene, here understood as a diagnosis and a condition of present international relations, many social scientists agree that anthropogenic climate change is a threat amplifier and multiplier which is not uniform in terms of its causal responsibility (Milani 2022). In August 2023, several scientists published a report on the alarming state of the planet's climate, recalling

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that "we witnessed an extraordinary series of climate-related records being broken around the world. The rapid pace of change has surprised scientists and caused concern about the dangers of extreme weather, risky climate feedback loops, and the approach of damaging tipping points sooner than expected" (Ripple et al. 2023, p. 1). Based on the key contributions of the Intergovernmental Panel on Climate Change (IPCC), social scientists have added that the human imprint on the global climate must be unpacked according to inequalities and differences among humans (race, gender), social classes, and states (Bourg 2018; Merchant 2020; Vanderheiden 2008).

Often, debates on the climate emergency assume that we will have to reinvent ourselves as a society and civilization; that we will have to rethink economic and political models that allow us to overcome these crises in the short term, but also on the longer run — all of this to ensure our viability as humankind and societies (Burke et al. 2016; Chandler, Cudworth and Hobden 2018). If climate change does not endanger the planet itself, whose resilience is confirmed with an approximate age of 4.6 billion years, the climate emergency and associated crises threaten some humans more than others. The younger generations and people living in the least developed countries, particularly small island developing nations, and poorer communities living in coastal areas, are more vulnerable and have less causal responsibility. Indeed, an additional problem in designing and implementing collective action mechanisms to deal with the climate emergency has been historical and geographical differences in terms of causal responsibilities (McNeill and Engelke 2014; Milani and Chaves 2022).

The climate emergency impacts several IR agendas, including development and security. As the UN Secretary-General, António Guterres, reminds us in the document published in September 2021, entitled *Our Common Agenda* — Report of the Secretary-General, "we have been reminded of the vital role of the State in solving problems, but also the need for networks of actors stretching well beyond States to cities, corporations, scientists, health professionals, researchers, civil society, the media, faith-based groups and individuals" (United Nations 2021, p.11). In fact, the COVID-19 pandemic has not only strengthened the perception of risks associated with deforestation of tropical forests, the thawing of the planet's permafrost, and the melting of the glaciers in the Arctic Sea or in the Andes, it has also generated an increased awareness of key interconnections between development and security agendas in international politics. Like many other transboundary threats to the security of individuals, societies, and ecosystems, no military capacity, no customs and border control, and no economic power has been able to stop the worldwide spread of the new coronavirus. Moreover, the construction of human vulnerability diagnoses has forced governments and policymakers (at least those who were not in denial), to recognize "vulnerability" as a process in which health, environmental-ecological, cultural-educational, and political-economic issues were necessarily intertwined, involving the economic system as a whole (Milani 2020; Moore 2014; Muradian and Cardenas 2015).

In its 14 February 2023 session, the UN Security Council opened the debate on "Sea-Level Rise—Implications for International Peace and Security", acknowledging that to reduce affected countries' vulnerabilities, it is critical to develop synergies between the Council and other UN bodies in addressing the negative effects of climate change on international peace and security, investing in peacebuilding programs, and scalable, durable solutions based on nationally owned and determined priorities. Although Council members are united about the need to combat the adverse effects of climate change, members continue to be divided over whether the Security Council should play a role in this respect and under what circumstances. Most Council members espouse more systematic engagement by the body on climate, peace, and security issues. Brazil, China, and Russia, however, have traditionally had concerns about the Council's approach to climate change, which they view as primarily a sustainable development issue, rather than a threat to international peace and security. These members consistently express concerns about Council encroachment on other UN entities and processes, most notably the UNFCCC, that are designed to deal with the adverse effects of climate change (Security Council Report 2023).

In this complex context, what are the main challenges that Brazil is confronted with in promoting its own attempts towards socially and environmentally sustainable development strategies? Sustainability here stands on three pillars, social, economic, and environmental, and the idea of "sustainable development" binds them together to uplift the spirit of what Ignacy Sachs used to call "ecodevelopment" (Sachs 1980). Since the Paris Accords, signed as a result of COP21 in 2015, sustainability also encompasses the climate dimension and deals with the internalization of energy transition costs (Castro 2021; Melo 2021).

In this regard, responding to the climate emergency and submitting an ambitious and rigorous Nationally Determined Contribution (NDC) represents a major challenge for a country such as Brazil, whose economic model is highly dependent on the development of the agribusiness and the export of primary

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commodities and natural resources, particularly from the mining sector and the oil industry. A first emblematic case comes from the agribusiness sector, which is responsible for an important share in Brazil's GHG emissions profile. It is true that the fossil fuel industry is the leading actor denying, slowing down or obstructing climate policies in the USA, the United Kingdom, Australia and many other countries; however, the agribusiness sector, one of the fastest-growing contributors to emissions related to land-use and deforestation is now globally recognized as a key player in any transition scenarios towards more sustainable development models (Edwards at al. 2023).² According to FAO, animal-based food responds for approximately 57% of food production emissions. FAO's global estimate of GHG emissions of animal agriculture, and other scholars have estimated that the sector contributes alone between 11.2% to 19.6% of total global GHG emissions (FAO 2006; Xu et al. 2021).

In Brazil, soybean monoculture and beef production are today the main causes of deforestation in the Amazon and Cerrado regions. Latin America is the region that exports the most beef and poultry in the world, with the livestock sector growing at an annual rate of 3.7%. As global demand for meat increases, so does the need for soybean production, which in turn leads to an irresponsible expansion pattern of agricultural frontiers and deforestation rates, especially in Brazil, the world's largest producer of this commodity. In a context of climate emergency and the search for technologies to mitigate environmental impacts, little has been done to address the relationship between meat consumption and production in the world, especially with regard to GHG emissions.

Figures published by Brazil's Ministry of Agriculture show that the country's agribusiness exports represented 37.4% of total Brazilian exports in 2000, but their share rose to 45.9% in 2016. Also in 2016, commercial exchange was led by China, with 24.5% of the total exported by Brazilian agribusiness, while the European Union (EU) and the United States of America (USA) represented, respectively, 19.6% and 7.4%. In 2022, China rose to 33.4%, the EU reduced its participation to 15.5% and the USA to 4.2%. Some sectors stand out in the Brazilian agribusiness export basket, including the soybean complex, meat, sugar and alcohol complex and forestry products, which, together, represent approximately 70% of the value exported by agribusiness in recent years (Brasil 2023). From the

² Climate obstruction "broadly refers to campaigns and other policy actions led by well-organized and financed networks of corporate and other actors who have actively sought to prevent global and/or national action on climate change over the past four decades" (Edwards et al. 2023, p.1).

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sustainable development perspective, with a herd of 234.4 million in 2022, Brazil has more cattle than people, according to the report of the Brazilian Institute of Geography and Statistics (IBGE), released in September 2023. The majority of the cattle is located on the Cerrado region, the Brazilian savannah, posing global warming and sustainability risks that are also related to local social and environmental conflicts.³

A second important example concerns the mining sector. First, it is important to recall that this industry does not affect the environment, natural reserves and indigenous territories only through direct impacts related to the loss of territory, deforestation, pollution of rivers, the reduction or degradation of agricultural land, or the reduction in the variety and availability of biodiversity in the forest, fields and waters. Mercury, for instance, is a highly toxic metal used in gold extraction processes that contaminates rivers, fish and, therefore, indigenous and riverside populations. Second, mining drives a series of other related economic activities that are necessary for its maintenance, such as civil construction, the generation and transmission of electrical energy, the mineral transport system (such as pipelines, railways and waterways), transformation industries, such as the steel industry, and export infrastructure such as ports and port complexes. All of these activities intensify the impacts on territories located in areas of direct influence of the mines, and on territories of traditional peoples and communities, many of them located thousands of kilometers from where the ore is extracted.

In addition, mining activities may also be linked to other informal economies, including illegal gold extraction and trade, arms and drug trafficking, which have significantly expanded their territorial networks in the Brazilian Amazon under the Bolsonaro administration (Machado 2011; Pereira 2022). Politically, both agribusiness and mining sectors, in their majority, have supported anti-sustainability, anti-science and anti-climate viewpoints, conspiracy theories, a clear preference for Brazil-USA relations (particularly under the Trump administration), pro-military dictatorship and ultra conservative political banners, which were organically conspicuous in narratives and strategies of Brazil's government between 2019 and 2022 (Gonçalves and Cafrune 2023; Silva and Teixeira 2022). Although former president Bolsonaro was defeated in the 2022 presidential elections, many of his supporters were elected as federal deputies, senators,

³ Data available at https://www.ibge.gov.br/estatisticas/economicas/agricultura-e-pecuaria/9107-producao-da-pecuaria-municipal.html? = &t = sobre (Access on 22 September 2023).

governors of states, and reactionary ideas, networks and movements still spread throughout the Brazilian society and political institutions.

Not less meaningful is the fact that the right to sustainable development is still conflated with developmentalism, a strong intellectual tradition within the Brazilian center-left ideological spectrum that is pervasive across media professionals, bloggers and journalists, former and current ministers, political parties, foundations, think tanks and scholars. As an economic mantra of many center-left political and social actors, developmentalism pundits still prescribe, for instance, that oil drilling at the mouth of the Amazon is an economic need to promote social policies nation-wide. This is one of the policy debates that illustrate the domestic contradictions related to developmentalism; as a matter of fact, one of its key assumptions is, still nowadays, the zero-sum game between economic growth and environmental protection. A broader and cohesive pro-climate, socially inclusive and economically prudent vision of sustainable development that cuts across different policy sectors is yet to be crafted and implemented by Brazil's federal and state-level governments. The need to understand how Brazil-China trade and investment relations interact with Brazilian domestic contradictions is our main goal in the next section.

The Focus: Brazil-China bilateral relations

In this section, I will focus on two domains, trade and investment, and analyze the interactions between bilateral relations and Brazil's domestic politics. First, trade-wise, in the wake of China's entry into the World Trade Organization (WTO) in 2001, the Asian giant gained relevance among Brazil's trading partners. This trend was accelerated with the creation of the BRICS group and in the aftermath of the 2008-2009 global crisis. In 2019, China surpassed the USA and became Brazil's main trading partner (Cano 2012; Nassif and Castilho 2020), contributing to an export basket increasingly concentrated in commodities or manufactured products that are intensive in natural resources. In 2018, they were responsible for 96% of exports destined to China. That year, just three products (soybeans, oil and iron ore) accounted for 77.2% of Brazil's total exports to China.

In fact, China's appetite for iron ore, oil, soybeans and meat, among other products, has fueled an impressive growth in China-Brazil bilateral trade. Growing Chinese demand and its effects on international prices during the first twenty years of the 21st century had a positive impact on Brazilian exports; however, the consolidation of China as a major producer of manufactured products has raised concerns among Brazilian firms about competition with locally produced products. In recent years, China has become the main origin of Brazilian imports, surpassed the participation of other trading partners (United States, European Union and Mercosur) and increased Chinese participation in Brazilian manufacturing sectors, with emphasis on sectors that are intensive in energy and technology (Hiratuka and Sarti 2016; Sugimoto and Diegues 2022). These trends showcase the centrality of China-Brazil trade relations in income generation and economic growth in Brazil. However, in structural terms they may also pose challenges to Brazil's own aspirations for an environmentally sustainable development model. Why so?

As part and parcel of this process, the agribusiness and the extractive industry have become key sectors in Brazil's political economy. Agribusiness as a whole (calculating its direct participation and indirect effects, such as the sale of agricultural machinery, inputs and services) contributed about 27.6% of the country's GDP in 2021, and 20.1% of total employment (Brasil 2023). In a similar way, the extractive industry (mainly oil and mining) has grown by 87.9% since 2000. The share of agriculture and extractive industries in Brazil's total exports grew from 9.1 and 7.1% in 2000 to 39.3 and 35.7% in 2021, respectively. In contrast, manufacturing has grown much less rapidly. Brazilian manufacturers, particularly textile producers, have been besieged by competitive producers in China. Therefore, considering that China is an industry-based economic and global political power, there is a need to analyze the composition of bilateral trade relations: according to Albuquerque (2014) and Vadell (2013), they reflect traditional North-South patterns, wherein Brazil plays the role of exporting natural resources and China increases its exports of manufactured goods.

Of course, although China is the main export market for Brazil's commodities, China-Brazil trade is not the only relevant variable to analyze Brazil's environmental degradation. There are multiple historical, economic and political causes to unpack Brazil's environmental degradation, many of them at the national level. In 2016, the year of the Paris Agreement ratification by Brazil, 51% of emissions were caused by deforestation. Since then, deforestation has remained an authorized practice in the context of fragile institutional governance and increase of illegal networks, a trend that was deeply reinforced by the Bolsonaro administration (Milani and Chaves 2022).

Today, deforestation accounts for approximately 1.8 billion tons of CO2 equivalent emitted by food systems in Brazil (56.3% of the total emissions), followed by agriculture (33.7%), energy (5.6%) and waste (4.2%). Since 1990, 92% of emissions from deforestation have occurred due to the formation of pastures, and another 5% due to soy production.⁴ As Raoni Rajão and his colleagues recall, although most of Brazil's agricultural output is deforestation-free, approximately 2% of properties in the Amazon and Cerrado (the Brazilian savannah) are responsible for 62% of all potentially illegal deforestation; they also stress that a substantial share of potentially illegal deforestation is linked to agricultural export commodities (Rajão et al. 2020). In 2022, the forest and land-use sector represented almost half of Brazilian gross emissions; Amazonian deforestation accounted for nearly 80% of the sector's total emissions (Pereira and Viola 2024).

In addition, the seizure and destruction of illegal mining machinery in the Amazon totals approximately US\$ 200 million, according to Brazil's governmental Institute of Environmental Protection, IBAMA. Actions against illegal mining in 2023 have already caused a billion-dollar loss to criminal activity. Among the items seized or destroyed were tractors, excavators, ferries, dredgers, planes and helicopters, as well as engines, boats, motorcycles, pickup trucks and camping equipment. According to the federal police, a scheme involving companies exploring and selling gold of illegal origin, and taken from Amerindian territories and environmental protection areas, would have circulated almost US\$ 2 billion between January 2021 and September 2023.⁵

Another key domestic element in this complex equation is the role of the agribusiness sector in Brazil's elections, legislative responsibilities and compliance with national environmental norms (Rajão et al. 2020; Santos and Moreira 2023). All these elements are part and parcel of the political economy of agribusiness and extractive industries in Brazil, even though the new Lula administration has so far made efforts to move beyond this trend and set up the goal of zero illegal deforestation by 2030.

⁴ Data and report produced by SEEG/Observatory of Climate, in Brazil, available at: https://www.oc.eco.br/o-agroquer-empurrar-a-conta-do-clima-para-voce/?utm_source = akna&utm_medium = email&utm_campaign = 23112023-ClimaInfo-Newsletter. More data available on https://www.oc.eco.br/seeg-sistemas-alimentares/ (Access on 23 November 2023).

⁵ Information from: https://g1.globo.com/ma/maranhao/noticia/2023/09/27/operacao-de-combate-a-extracaoilegal-de-ouro-em-area-de-protecao-ambiental-e-realizada-no-ma.ghtml (Access on 28 September 2023).

Second, the interaction between Brazil's domestic politics and Chinese investments points out a different picture, to a greater extent in line with Brazil-China strategic relations in the field of climate change and energy transition, as we shall see later on. Investment portfolios showcase an ambition for a sustainable transition from the fossil economy to renewable sources of energy, particularly in more recent years. Additional data published in the most recent CEBC report on Chinese investments in Brazil signals that 2022 was a year of contrasts. In 2022, China had the lowest amount of investment in Brazil since 2009, with approximately US\$1.3 billion, 78% less than what it had invested in 2021; however, 2022 also features an impressive number of projects, 32 in total, that is 14% more projects than 2021.

In 2022, the world's main beneficiary of Chinese investments was Saudi Arabia, followed by Indonesia and Hungary. Brazil was the ninth most important destination for Chinese investments in the world in 2022, behind Argentina (Table 1). In 2021, Brazil had been the first largest destination for Chinese investments in the world. In 2022, 50% of projects focused on the electricity sector, with emphasis on State Grid Corporation of China, China Three Gorges and State Power Investment Corporation (CEBC 2023).

Country	Value
Saudi Arabia	5.55
Indonesia	3.91
Hungary	3.75
Singapore	2.73
USA	2.59
Malaysia	1.57
Zimbabwe	1.43
Argentina	1.34
Brazil	1.30
Germany	1.12

Table 1: Main Recipients of Chinese Foreign Investment in 2022 (US\$ billion)

Source: CEBC (2023), p. 17.

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In terms of stock, between 2005 and 2022, Brazil is the fourth largest beneficiary of Chinese investments, behind the USA, Australia and the United Kingdom. Between 2007 and 2022, Brazil had a stock of US\$71.6 billion in

Chinese investment: in terms of value, the electricity sector absorbed 45.5% of these investments, oil extraction 30.4%, metallic minerals extraction 6.2%, manufacturing industry 6.2%, infrastructure projects 4.4% and agriculture 3.4%. The other sectors had individual shares of less than 2%. In South America, which concentrates 96% of Chinese investments in Latin America, three recent trajectories show different features of the portfolio: in the 2000s, the focus was on mining and oil; in the 2010s, in mergers and acquisitions in traditional infrastructure, construction contracts and public service concessions; in more recent years, the focus has been on renewable energies and electric vehicle supply chains. It is important to recall that the so-called lithium triangle (Argentina, Bolivia and Chile) concentrates 61% of the reserves identified in the world. Brazil has only 1% of these reserves (CEBC 2023).

At the national level, in 2023 Brazil's new administration announced a revised GHG emission target at the United Nations Climate Ambition Summit: an annual cap of 1.32 Giga tons of GHG by 2025, equivalent to a 50% reduction from 2005. That implies that Brazil intends to cap 2030 emissions at 1.20 Giga tons of GHG, a reduction of 53% compared to 2005, a climate change target that, if followed, would be more ambitious than the one announced by the USA, which had pledged to cut emissions by 50-52% by 2030, also compared to 2005.6

Therefore, Chinese investments in Brazil's renewables and energy transition may contribute to more policy coherence in both countries' climate commitments. There is no doubt that Brazil and China have been vocal players in climate negotiations, and that both countries have ambitious expectations concerning their future participation in energy transition frameworks (Franchini, Viola and Barros-Platiau 2017; Jinnah 2017; Milani and Chaves 2022). Given the asymmetries in terms of economic weight, development model and demographics, the commitment of some countries is known to be more crucial to guarantee the maintenance of the global average temperature below 1.5° C in relation to the pre-industrial level, such as proposed in the Paris Agreement. There is no future climate stability without the USA, China, and I dare say, without Brazil, a country that hosts 60% of the sovereign territory over the Pan-Amazonia rainforest.

In the particular case of China, its participation in these efforts carried out at a global level will be essential, since it is the world's second most important

⁶ For more detailed information, please refer to: https://www.brazilclimatesummit.com/_files/ugd/80abb7_ 6780e1ac6e064e6f8831dfc3b1a3fb63.pdf. See also: https://www.theverge.com/23875724/climate-week-nycunited-nations-climate-change-ambition-summit (Access on 28 September 2023). j

economy, the largest emitter in absolute terms, responsible for a third of global carbon dioxide emissions and the largest global investor in renewable energies. That is to say, China's commitment will be fundamental to achieve climate change mitigation objectives (Amaral and Milani 2023). As Tulio Carielo recalls, "from 2016 to 2022 the value of China's announced investments in the global electric vehicle value chain increased more than forty-fold, from US\$ 605 million to US\$ 23 billion" (CEBC 2023 p. 34). Latin America is a key region for Chinese investments in the renewables sector: for instance, in 2022 Great Wall Motors announced investment plans to produce electric vehicles and batteries in Brazil.⁷

Such investments illustrate in practical terms Beijing's changing official positioning in multilateral climate talks and decision-making instances, aiming to take on more responsibility in the global climate burden. China's Ecological Civilization framework proposes the synchronization between socioeconomic development, low environmental impact and reduction of greenhouse gas emissions, as well as the efforts made by Chinese diplomacy to demonstrate that the country is capable of contributing to collective planetary action and that is interested in participating in international climate negotiations (Amaral and Milani 2023). As Arthur Hanson asserts, China uses the narrative of the Ecological Civilization as a coherent conceptual framework to adjust its development trajectory and its foreign relation and as an attempt to meet 21st century challenges. "It differs from sustainable development in the emphasis placed on political and cultural factors, as well as on defining new relationships between people and nature that would permit living well, and within the eco- environmental bounds of planet Earth" (Hanson 2019, p. vi). Therefore, while Chinese investments in renewables indicate clear-cut Chinese interests in global technological competition in energy transition, it also demonstrates commitment and solidarity towards Southern countries facing short-term adaptation difficulties, such as the least-developed states, small islands, and countries with threatened coastal zones (Jinnah 2017; Ugarteche and De Leon 2022).

At the Paris Climate Summit, known as COP21, China's performance had already become notable thanks to the commitment made for the first time to absolute objectives. In October 2021, President Xi Jinping's declaration that China would be carbon neutral by 2060 was officially submitted to the United Nations

⁷ See: Financial Times (22 January 2022), available at https://www.ft.com/content/68ee9fc3-8af6-4feb-809f-0e3b0f7a3ec4 (Access on 20 November 2023).

Framework Convention on Climate Change (UNFCCC) and was well received by the international community. Subsequently, the declaration in the United Nations General Assembly that China would commit to stop building coal plants abroad, if fulfilled, would represent a great leap in reducing greenhouse gas (GHG) emissions, taking into account that the country is currently the largest sponsor of these plants worldwide (CREA 2022). In multilateral climate negotiations, China also aligns its national interests with those of developing nations in the defense of the principle of "common but differentiated responsibilities", CBDR, which defends that countries should contribute to mitigation efforts according to their respective capacities, thinking about the responsibility of global collective action also in terms of historical contributions, since the Industrial Revolution (Amaral and Milani 2023; Jinnah 2017).

In addition, China has issued guidelines on the actions of banks and companies abroad have paid special attention to environmental standards and the reduction of GHG emissions. Among the relevant documents are the "Guidelines on Environmental Protection in Overseas Investment and Cooperation," which encourage companies to "apply the concept of ecological civilization" by prioritizing "green and high-quality projects abroad" and adhere to international environmental protection standards, especially when operating in countries with weak environmental governance and the "Green Development Guide" for New Silk Road (BRI) projects that, in order to reduce environmental impacts, stipulates a system based on traffic light colors to classify companies according to estimated environmental risk (Amaral and Milani 2023; Hanson 2019; MEE 2022).

The Discussion: rejuvenating the strategic partnership between Brazil and China

According to the 2023 IPPC report *Summary for Policymakers*, global GHG emissions have not stopped increasing, "with unequal historical and ongoing contributions arising from unsustainable energy use, land use and land-use change, lifestyles and patterns of consumption and production across regions, between and within countries, and among individuals" (IPCC 2023, p. 4). China represents approximately 26.5% (9.5 tons per capita) and Brazil 3% (10 tons per capita) in global GHG emissions, whereas Least Developed Countries (LDCs) and Small Island Developing States (SIDS) have much lower per capita

emissions (1.7 tCO2-eq and 4.6 tCO2-eq, respectively) than the global average, 6.9 tCO2-eq (IPCC 2023).

Due to their respective share in global GHG emissions, but also in view of their diplomatic history of emphasis on South-South relations and respective degrees of vulnerability to climate extreme events, both Brazil and China need to address the climate emergency in their domestic policies and international strategies. Nationally, in both countries there are great social expectations for a just energy transition, better land-use and forest management, cleaner air in large cities, and the implementation of climate adaptation strategies to deal with more frequent and intense extreme events (Da Veiga Lima and De Souza 2022; Qi et al. 2020; Souza Santos, Kahn Ribeiro and Souza de Abreu 2020; Zhou, Wang and Feng 2023). According to the Yale Program on Climate Change Communication, public opinion polls in Brazil show most Brazilians believe that anthropogenic climate change exists and trust scientists when they reach a common diagnosis on the phenomenon. In China nearly all citizens support the country's participation in the Paris Climate Agreement (96%), and around 90% of respondents support the transition towards low-carbon futures.⁸

Internationally, other Global South countries call for a concrete expression of the South-South diplomacy of solidarity that both Beijing and Brasilia have historically supported in several multilateral forums, such as the United Nations Office for South-South Cooperation and the BRICS grouping. Least developed countries and small islands are among those less responsible and most vulnerable states who require urgent and responsible action by the big players, including China and Brazil. In its most recent summits, the BRICS group has discussed ways and means toward a less Western-centric global order, decided to set up economic institutions (such as the New Development Bank) and produced considerable impact on issues related to South-South cooperation, hierarchy and status in international politics (Duggan et al. 2022; Kahn 2015; Nogueira Batista Jr. 2016; Stuenkel 2020; Zondi 2022). The foundation of the BRICS is a hallmark in the trajectory of recent Brazilian foreign policy and in Brazil-China relations that has allowed both countries to deepen their political and economic cooperation, including key areas such as renewable energies and lower carbon economic models (Abrão & Amineh 2024; Jaguaribe 2018 e 2021).

⁸ The report on Brazil is available at: https://climatecommunication.yale.edu/publications/climate-change-inthe-brazilian-mind/. A UNFCCC release on the Yale report on China is available at: https://unfccc.int/sites/ default/files/resource/Press%20Release.pdf (Access on 20 August 2024).

Between 12 and 15 April 2023, Brazil's president paid an official visit to China, following the organization of the Brazil-China Economic Seminar, which had gathered together more than five hundred business representatives from the two countries in Beijing, on 29 March. President Lula da Silva's official visit to Beijing was an opportunity to strengthen interstate cooperation in the fields of trade, agriculture and technology. The official communiqué includes a long list of agreements in several sectors. Lula da Silva and Xi Jinping reaffirmed their commitment to multilateralism (item 4 of the communiqué), the central role of the United Nations system and the relevance of plurilateral groupings, such as the G20, BRICS and BASIC (item 7).

Both countries acknowledged the effects of climate change and decided to foster cooperation "to speed up the transition to a low-carbon economy" (item 10), including the creation of a Subcommittee on the Environment and Climate Change within Sino-Brazilian High-Level Commission for Consultation and Cooperation (COSBAN). Item 29 of the communiqué explained their commitment to energy transition and the mitigation of GHG emissions "in a fair and equitable manner", considering the singularities of each national context, including the countries' needs in terms of energy security. Item 30 of the communiqué stressed "renewable energies, transition and energy efficiency, with an emphasis on bioenergy, hydrogen and sustainable aviation fuels".9

However, China's and Brazil's climate promises are confronted with some key challenges, as presented in the previous section. In this connection, I argue that both countries could seize today's diplomatic converging interests to integrate climate-related criteria in their bilateral strategic partnership, signed in 1993 and strongly rejuvenated in 2023. This rejuvenated strategic partnership could stress the two countries' political will and leadership roles in multilateral negotiations (China in the energy sector, and Brazil in deforestation and low-carbon agriculture models), despite their different causal responsibilities in historical terms and in today's global GHG emissions. In addition, it could emphasize their strong commitment to energy transition frameworks towards a low-carbon economy in distinct sectors, including agribusiness.

As a matter of fact, studies show that addressing the climate impacts of agribusiness and food production is key to avoid catastrophic global warming (Clark

⁹ The joint communiqué is available at: https://www.gov.br/mre/en/contact-us/press-area/press-releases/ joint-communique-between-the-federative-republic-of-brazil-and-the-people2019s-republic-of-china-on-thedeepening-of-their-global-strategic-partnership-beijing-14-april-2023 (Access on 19 November 2023).

et al. 2020; Ivanovich et al. 2023). Given today's limited potential of technological innovations attempting to mitigate GHG emissions in this sector, which is so relevant in Brazil-China bilateral relations, investments in agriculture research, shifts towards more diversified diets, local practices that are environmentally and socially sustainable, while at the same time maintaining food security and nutrition safety, are critical tools to meaningfully lower emissions required to limit global warming to 2°C (Heinrich Böll Foundation, 2015; Santos and Glass, 2018).

In this connection, at a workshop organized at Getulio Vargas Foundation in Sao Paulo in April 2024, a group of businesspeople, researchers, rural producers, and representatives of agribusiness associations gathered to discuss trade relations between Brazil and China. The focus of the debate was soybean and meat exports to the Asian giant and the possible sustainability parameters to be adopted. The director of the China International Center for Agricultural and Rural Development, Kevin Chen, kicked off the conversations by firmly stating that "we know that climate change has already led to a reduction in soybean production in Brazil and to a decrease in soybean exports. China, as Brazil's main importer, has already noticed this reduction" (sic). He then declared that "we need to end deforestation in Brazil due to the expansion of soybean and beef production. We hope that this will happen without harming production and livelihoods" (Borges, 2024).

Would China, whose diplomacy traditionally defends non-interference in other sovereign country's domestic issues (for instance, in environmental legislation and monitoring of deforestation), be shifting from a key importer that puts more pressure on deforestation to a profile that facilitates the development of deforestation-free value chains? Would Brazilian agribusiness be open and willing to invest in this changing scenario in order to keep selling to its largest international client? These are trends and questions that scholars and independent analysts must monitor in the coming years to understand whether new practices are emerging, if promised become practices in the bilateral relations between Brazil and China. From the Brazilian perspective, even of the Lula administration has been committed to reducing deforestation in the Amazon and decided to give priority to energy transition and climate policies, particularly through the Interministerial Committee on Climate Change, substantial obstacles to climate-change mitigation and adaptation persist, including a Congress dominated by fossil fuel lobby and actors advocating environmentally destructive development. Another key challenge for both countries is related to the potentially negative effects of the expansion of the BRICS group, now including newcomers that are

major fossil economies, such as Saudi Arabia and the United Arab Emirates (Pereira and Viola 2024).

Concluding Remarks

In this article, I have shown that China's accelerated growth and double participation in the world's economy as a major demander of commodities and a large producer of manufactured products have resulted in important changes on its bilateral trade with Brazil since the beginning of the 2000s. Such trade relations have interacted with a series of domestic variables in Brazil, wherein the development of agribusiness and mining sectors fostered growing deforestation rates and affected the country's land-use and GHG emissions. I have also explained that when considering China's investments, it is important to understand their potential impact on the further development of renewable energies and the national market of electric vehicles and batteries in Brazil and South America. Due to the scale of its economy and its geopolitical projection, China's investments and technological drivers have environmental and climaterelated consequences for the future of China-Brazil strategic partnership.

Brazil and China must jointly defend solutions to anthropogenic climate change based on the assumption that they have their own right to a development model that should be socially and environmentally sustainable. The adoption of the climate emergency agenda in Brazil-China strategic partnership could be part of a new phase in their bilateral relations. In times of a "risen China" (Breslin 2021), and considering the much-needed (energy, socioeconomic, ecological, technological) transitions due to the climate emergency, this article suggests that Brazil and China must seize the opportunity if they want to play a more positive role in reconfiguring their development strategies while respecting the new constraints of the Anthropocene.

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