

The admission of new members to BRICS as a key point in Brazil's energy transition

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The BRICS group has announced the admission of its new members during its last Summit in Johannesburg, in August 2023. The entry of Saudi Arabia, Iran, Argentina, Egypt, Ethiopia, and the United Arab Emirates may be understood as an important event in the world order. Due to this event, it is possible to raise questions about different areas, such as environmental conservation and energy transition.

Another relevant fact to be analyzed is whether the current Brazilian president, Luis Inácio Lula da Silva, now in his third term, will meet the goals announced during his electoral campaign. It is worth mentioning that President Lula marked throughout his campaign his intention to strengthen Brazilian diplomacy and bring Brazil “back to the world”, in addition to tackling a plethora of environmental issues. Lula has promised to focus on climate change, advancing the energy transition, meeting targets for reducing the emission of associated gasses to the greenhouse effect that the country assumed at the 2015 Climate Conference, defending the Amazon from devastation, and combating illegal deforestation. In addition, this analysis aims to understand how the Brazilian government may or may not benefit from the adhesion of new members to its energy transition.

Brazil's status in the energy sector

Brazil is one of the countries with the cleanest energy matrix in the world, with around 48% of its national production based on clean sources, especially hydroelectric, solar, wind, and biofuels (EPE, 2022). Furthermore, according to the Bases for the Consolidation of the Brazilian Hydrogen Strategy, produced by the Energy Research Company, 80% of its energy originates from renewable sources, which could enable the country's rise as a global hub for the export of renewable energy (Borges, 2022).

Furthermore, the country differs from other BRICS members, as it has an emissions "profile" directly linked to land use and forest deforestation (IPEA, 2021). Another relevant issue that differentiates Brazil in the energy sector is that it is the only member of the BRICS that has a relevant role in the production of biofuels and biomass in its matrix. The country has a large amount of carbon credits, but must create a national market that will depend on dialogue between the Executive and Legislative branches (Basso; Viola, 2022).

Moreover, Brazil has a high potential for advancement in the decarbonization of its industry, with the expansion of the share of wind and solar energy, in addition to ongoing incentives and regulations for the production of green hydrogen. For this to happen, planning, improvement of transmission lines and expansion of a smart grid will be necessary (Basso; Viola, 2022).

Finally, it is worth highlighting that the country needs to unlock processes and bills blocked in the Legislative Branch, such as Bill No. 4.516/2023, which determines the reduction of CO₂ emissions in the aeronautical industry, through the use of Sustainable Aviation Fuel (SAF). As well as progress in the approval of Bill No. 2.308/2023, which includes green hydrogen and fuel hydrogen in the National Energy Policy. The regulation of these measures is essential for advancing Brazilian decarbonization, as well as a regulatory incentive for the production of these fuels.

With the advancement of laws and development of policies in the sector, there will be an expansion of the sustainable energy market that can be used as a cooperation tool. Brazil cooperates with several countries in the energy sector, such as Germany in green hydrogen, among others. The very event of new members joining the BRICS and the Presidency of the G20 by Brazil in 2024 indicates an important step in expanding dialogues, strengthening environmental diplomacy and Brazilian leadership.

Main challenges for the energy transition in BRICS

Johannesburg Declaration II, in addition to providing for the admission of new members to the group, also established precepts for a partnership of inclusive multilateralism. Energy, addressed in point 70 of the Declaration, is the most relevant for this analysis. On this occasion, the group prioritized cooperation in the biofuels, hydroelectric energy,

fossil fuels, nuclear and hydrogen energy produced on a zero and low emissions basis technologies and processes, as central to a just transition to flexible, resilient and sustainable energy systems. He also highlighted the need for research and technical cooperation within the scope of the BRICS Energy Research Cooperation Platform (JOHANNESBURG II DECLARATION, 2023).

Although the Declaration works as a guide, it is important to keep in mind that the energy transition is not simple, as it involves investments, social and political issues that differ greatly in each country. The group faces as its main challenge the geographic distance between its members, very divergent socioeconomic and legal models and a certain amount of competition among group members over influence in the energy market (IPEA, 2021). Taking this into consideration, the diplomatic misalignment between countries such as Saudi Arabia and Iran along with the risk of declining interest of cooperation in the sector, could make it possible to guide alternative cooperation processes, such as bilateral agreements or private sector partnerships.

For Basso and Viola (2022), the existing dynamics in the emissions and domestic politics of States, along with their performance in foreign policy, do not allow the BRICS to form a coalition in international climate policy. It is clear that with the accession of new members it will be necessary to reevaluate the policies that will be undertaken and assess the progress of global decarbonization as a whole, expanding research on the topic in order to identify the different initiatives and cooperation underway.

Challenges and opportunities in BRICS

Energy cooperation within the BRICS group manifests itself in two directions: multilateral and bilateral. The multilateral approach involves international issues such as compliance with environmental obligations and the joint development of energy technologies and policies. However, differences between countries, such as geography, development models and trade agreements, negatively affect this cooperation. Bilateral cooperation occurs mainly in trade and investment, highlighting the promotion of strategic partnerships and the diversification of energy sources (IPEA, 2021).

China stands out as an investor and leader in low-carbon

technologies, offering significant potential for technological cooperation, although it still uses mostly polluting sources. Russia, in turn, maintains robust trade relations with China in oil and gas, and seeks to expand its presence in India and Brazil. Brazil, in addition to being an energy supplier to China, stands out in bioenergy and seeks to expand its collaboration with other BRICS, especially South Africa. Cooperation in nuclear energy is also relevant, with Russia playing an important role.

Clean hydrogen appears as an opportunity for energy integration and cooperation in the BRICS. Countries such as China and Russia can provide technology, while Brazil, South Africa and India can become exporters of clean hydrogen, taking advantage of their renewable sources. A collaborative approach could complement national initiatives and unlock synergies in infrastructure development, making electricity an internationally traded commodity (Basso; Viola, 2022). International cooperation projects can maximize financing in technology and innovation, driving the advancement of the main hydrogen technological routes.

Conclusions

The admission of new members undoubtedly calls into question the group's concerns from 2024 onwards. But without a doubt, what was presented in Johannesburg Declaration II must be followed, in order to promote greater dialogue on the development of cooperation, whether bilateral or multilateral.

In this sense, Brazil, under the current government of President Luis Inácio Lula da Silva, has the role of acting as a leader, as usually does in Latin America, not only due to its advanced status in the production of renewable energy, but also due to its active and proud diplomacy. It is also important for Brazil and other members of the group to promote partnerships in international forums and leverage a sector that is fundamental to their respective national and energy security, in a sustainable and socially fair way.

The inclusion of new members in the BRICS group, announced during the Johannesburg Summit in August 2023, marks a significant milestone in the global order. This expansion prompts critical questions regarding environmental conservation and energy transition, particularly concerning Brazil's commitments under President Lula da Silva's leadership. Brazil, with its clean energy matrix and potential for renewable energy exports, stands uniquely positioned

within the BRICS, facing distinct challenges and opportunities in its energy transition journey.

However, navigating the complexities of multilateral cooperation, addressing diplomatic misalignments, and harnessing the potential of clean hydrogen cooperation are vital steps towards realizing a sustainable energy future within the BRICS framework. As Brazil assumes the G20 presidency in 2024, it holds a pivotal role in advancing environmental diplomacy and shaping the collective energy agenda. By leveraging its expertise in renewable energy and fostering international partnerships, Brazil can drive meaningful progress towards a more resilient and sustainable energy landscape within the BRICS and beyond.

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