

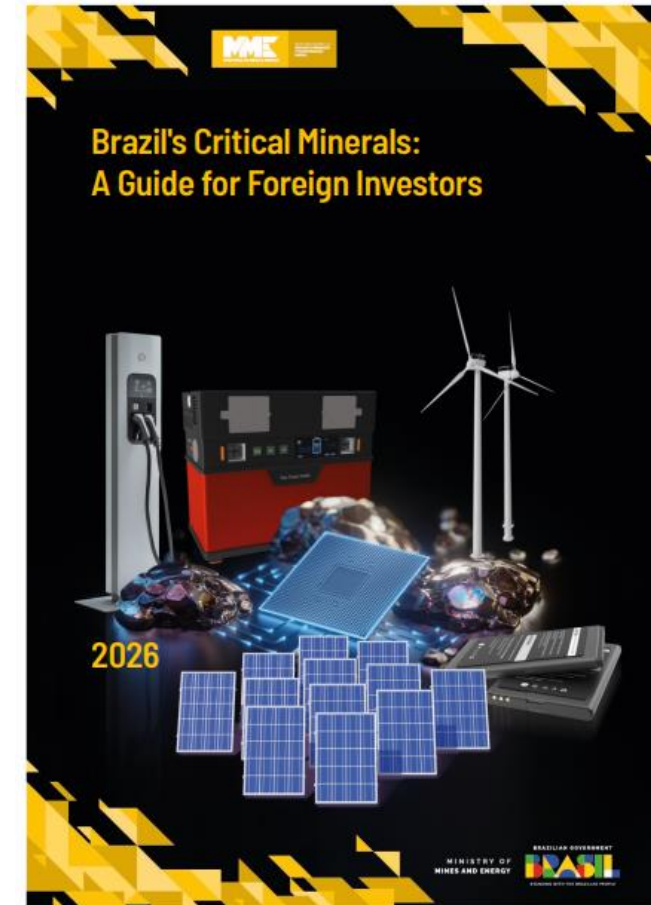
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# **Brazil's Space Activities Act and the Exploration of Space Resources**

# Brazil as a mining power

- Brazil ranks among the world's top five mining powers
- The country holds significant reserves of iron ore and strategic rare minerals
- Despite its established position in global mining, Brazil continues to seek foreign investment in the sector
- Complex relationship US-Brazil-China:
  - The US views Brazil's rare mineral reserves as a strategic opportunity to reduce dependence on Chinese supply chains
  - Brazil has historically pursued a non-aligned position in the US-China rivalry, while conditioning partnerships on the preservation of national strategic control over its resources



# Brazil's strategic use of space affairs

- Brazil is an active participant in international space governance forums
- In global space debates, Brazil historically positions itself as an advocate for the interests of developing countries
- Brazil promotes the use of space cooperation and governance to address inequalities within international forums and institutions
- Through this approach, Brazil seeks to strengthen its role as an emerging regional space power



# Brazil's Space Activities Act

- Within this context, Brazil enacts its Space Activities Act (Law 14,946/24)
- Although not specifically focused on space resources, the Act permits their exploration through a licensing regime administered by the national space agency

Does this mean that Brazil joins the 'club' of domestic regulators of space resources activities?



# A vague framework

- Brazil's Act does not establish a comprehensive regulatory framework governing space resources activities, nor does it define ownership or equivalent rights in respect of extracted resources
- The Act defines space resources as 'natural resource(s) originating from celestial bodies', which are defined as celestial bodies as 'natural object(s) originating from outer space, such as asteroids, comets, stars, meteors, meteorites, planets, and natural satellites'.
- It then proceeds merely to provide explicit authorisation for their exploration, as follows:

Article 3. This Law applies only to the following space activities:

VIII - exploration of celestial bodies;

IX - exploration of space resources;

# Exploration or exploitation?

- Law 14.946/24 is unclear whether it allows only the exploration of space resources or also their exploitation
- Exploration: Scientific and exploratory investigation
- Exploitation: Extraction and processing of resources for commercial purposes





# Clarification of Brazil's institutional framework

- The paper conducted a systematic interpretation of Brazil's broader domestic legal order and identified an **interpretative convergence between 'exploration' and 'exploitation' under Law 14.946/24**



## **Bill's justificatory materials:**

Economic exploitation constituted both the catalyst and the primary rationale for the Act's development



## **Nuanced provisions within the Act:**

The permissibility of the commercial exploitation of space resources is found in the Act's Article 11 and in Chapter VI



## **Broader Brazilian legal regime governing natural resources:**

The term 'exploitation' is rarely used. Instead, "exploration" often encompasses economic exploration, including at a constitutional level



## **International legal framework to which Brazil is bound:**

Outer Space Treaty  
Moon Agreement  
Artemis Accords

# Lawfulness of space exploration activities

- To Brazil, the permissibility for such activities is intrinsically linked to the principle defined by Jakhu et al (2024) as the ‘common benefit’ principle
- This principle encompasses non-discrimination, equality of access, due regard for the interests of other states, and, above all, the prohibition of national appropriation
- The common benefit principle was moved by the insistence of the Brazilian delegation from the preamble to the operative part of the 1963 Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space
- The principle was later consolidated in the OST’s Article 1

## ARTICLE I

The exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of their degree of economic or scientific development, and shall be the province of all mankind. (...)

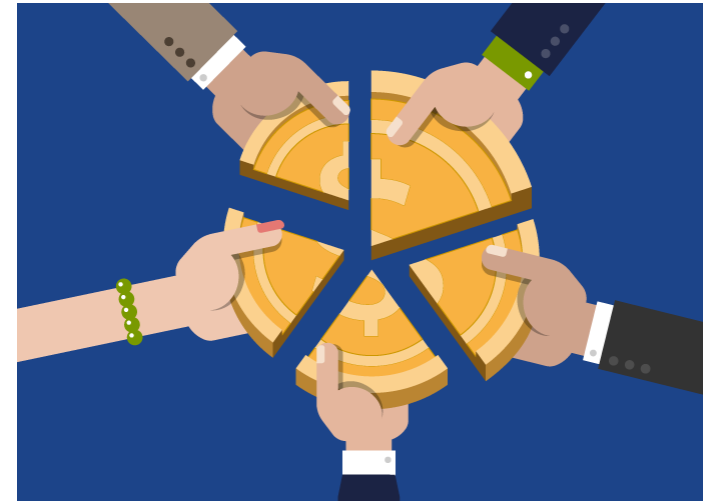


# Benefit-sharing

- Of particular importance to Brazil: **Benefit-sharing mechanisms**
- To secure this outcome, Brazil emphasises the importance of multilateral discussions conducted through inclusive processes and consultations within COPUOS, avoiding 'club-based' decision-making.
- In Brazil's view, an ideal framework should draw upon existing governance regimes for the management of limited resources in international areas



Clear terms of equity, rules on access to technology, be on the open market, at a fair and reasonable price, or through joint ventures with industrialised states



# Brazil's goals

- Although the commercial exploitation of space resources is not yet technologically feasible for Brazil, supporting the permissibility of such activities through domestic legislation enhances Brazil's profile in international discussions and strengthens its negotiating position
- By leveraging this stronger position, Brazil is vocal in advocating for an international framework that promotes the equitable sharing of benefits derived from the commercial exploitation of space resources
- Through this approach, Brazil seeks to reinforce its leadership in defending the interests of developing nations and to consolidate its regional influence as an emerging space actor.
- In doing so, Brazil further strengthens its broader international standing and strategic influence in global space governance debates.



# Conclusion

- Identification of an interpretative convergence between exploration and exploitation under Brazil's Space Activities Act
- For Brazil, space resources exploration is lawful only if the benefits derived from such exploration are not restricted to the most technologically advanced nations
- Brazil thus has the principle of 'common benefit' as a foundational element of its position, and is vocal in support of benefit-sharing mechanisms
- By doing so, Brazil seeks to reinforce its leadership as the representative of developing nations' interests and to consolidate its regional influence as an emerging space actor