ARTICLE 6 UPDATES

DEFINITION OF ARTICLE 6.2 It was defined that transactions through the Article 6.2 mechanism will be independent between countries.

Each country participating in the negotiation must ensure that it has arrangements in place to authorize the use of ITMOs (Internationally Transferred Mitigation Outcomes) and submit an updated national emissions inventory and NDC (Nationally Determined Contribuitions). This allows mitigation programs such as country ETS (Emission Trading System) to connect. Its transactions will occur for the purposes of I) achieving NDCs, II) "other international mitigation purposes" or III) "other purposes" (UNFCCC, 2021a). It is understood that CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation) is included for other purposes of international mitigation and, for other purposes, voluntary markets and domestic regulated markets. There is no requirement that the transferor country must have achieved its NDC by trading only in the excess of the target.

DEFINITION OF ARTICLE 6.4

The mechanism in Article 6.4 will be operated by the Supervisory Body and will transact 6.4ER (6.4 Emission Reduction). As well as with the Article 6.2, transactions under this mechanism will take place for the purpose

of I) achieving NDC, II) "other purposes of international mitigation" or III) "other purposes". The types of projects have not yet been defined, but it was determined that methodologies and the definition of the baseline of the projects should consider a strategic market analysis of the best technologies and that less strict criteria based on historical emissions could be used if applied at a discount. The methodologies may be developed by public or private entities participating in the mechanism, by the host country, by interested parties or by the Supervisory Body and will be approved by the Supervisory Body in compliance with its requirements and the requirements of article 6.4. The additionality of projects should consider mitigation projects whose scope does not contain activities already required by law.

CDM CREDITS

ments: CERs (Certified Emission Reduction) from projects registered on or after 2013, and identified as pre-2021 emission reductions, may be used only for compliance with NDCs until the year 2030 without undergoing corresponding adjustments. And, in the case of projects that have not yet issued CERs, projects whose request for transition to the Article 6.4 mechanism is made until 2023 and approved until 2025, provided that they are consistent with the criteria of the new mechanism, are allowed to continue (UNFCCC, 2021b). According to data extraction from the CDM project registry carried out in April 2022, there are 46 registered CDM projects that fit the above definitions, whose supply potential is of 83.5 million credits. (UNFCCC, 2022a). **CORRESPONDING ADJUSTMENTS**

It was defined that credits originated from projects registered with the CDM (Clean Development Mechanism),

initiated from the Kyoto Protocol, can be considered in the Paris Agreement within the following require-

Another point defined at COP 26 was the acceptance of matching adjustments to avoid the possibility of

double counting emission reductions. In this regard, it was decided that when a country sells an amount of ITMOs or 6.4ERs, it must subtract the amount sold from the emission reductions accounted for in its NDC. In the same way, the buying country must include the quantity purchased in the emission reductions accounted for in its NDC considering the existing rates in each mechanism (UNFCCC, 2021a). The reporting of the corresponding adjustments at the national level will happen through the Biennial Reports (starting in 2024). The corresponding adjustments do not apply to CERs transferred from the CDM and if the Article 6.4 project host country does not issue the letter of authorization for use for NDC or other international mitigation purposes (UNFCCC, 2021a, 2021b). The decision of Article 6 recognized that not all carbon credits will be correspondingly adjusted and that there will continue to be carbon credits that do not represent mitigation that contribute to local NDC (GOLD STANDARD, 2021). Furthermore, the corresponding adjustments are optional for transactions in the voluntary market.



GLOBAL OVERVIEW OF THE CARBON MARKETS



36 **Subnational jurisdictions**

Have carbon pricing initiatives

REGULATED MARKETS



12 GtCO₂ = 23% annual global GHG (greenhouse gases) emissions

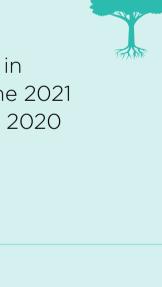
Source: WORLD BANK (2022).



VOLUNTARY MARKET



10x







Price of traded removal credits



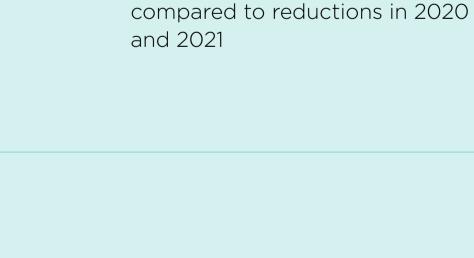


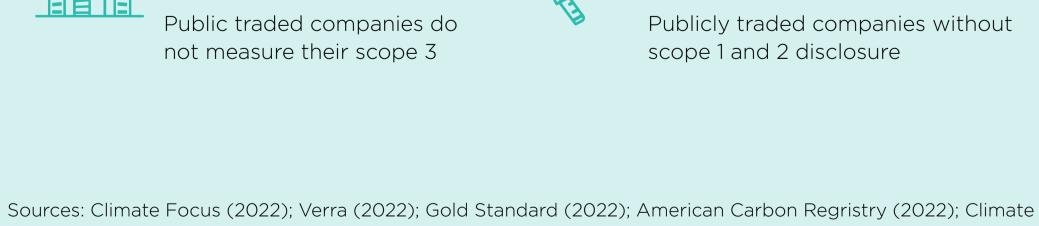
Public traded companies do

Action Reserve (2022); Donofrio et al. (2021); MSCI ESG Research (2022)

not measure their scope 3

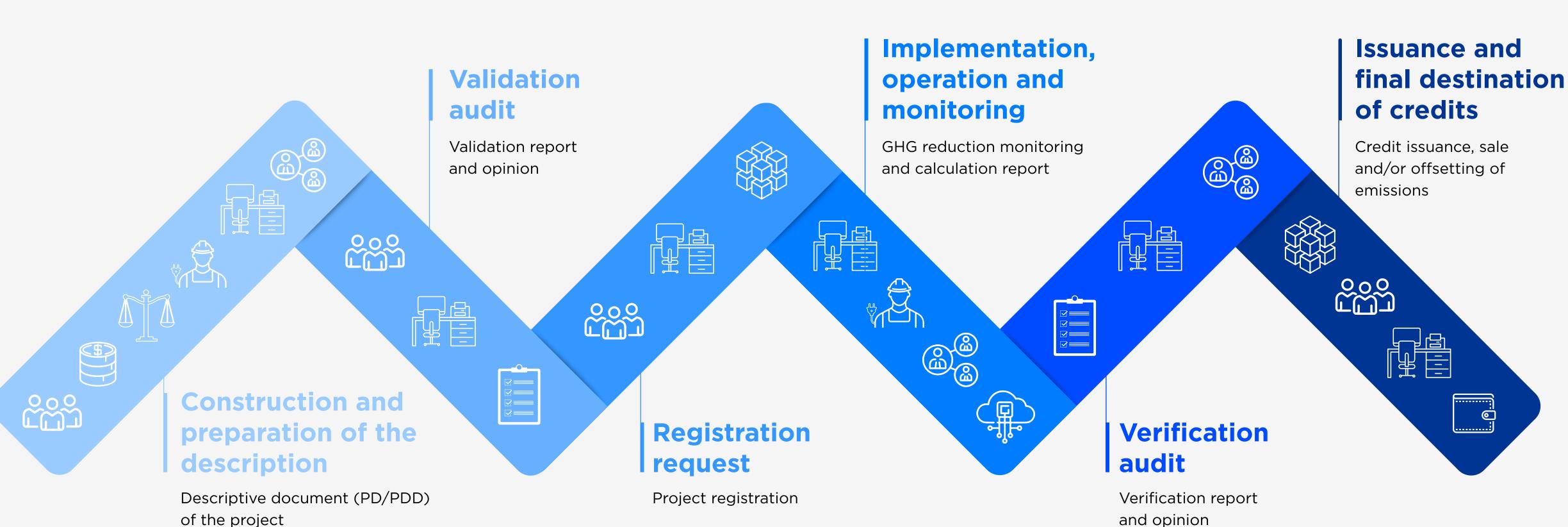
credits in 2020 and 2021





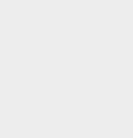


NATIONAL CARBON MARKET ECOSYSTEM



Project Financiers proponent Investors or financial Individual or organization

Types of players in the Brazilian market



that controls and is responsible for the project Standards and





Third-party auditors Responsible for validating and verifying documents

institutions that make

resources available for

the project



Local communities and beneficiaries

by the project

Local population benefited

Ensures activities

are carried out on site

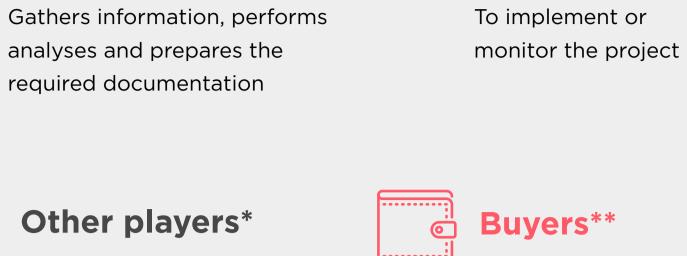


Project

developer

analyses and prepares the

required documentation



Technology

of carbon credits

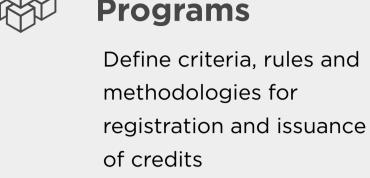
for use, resale or

capitalization on

credit appreciation

Source: Own preparation.

Suppliers



of credits **Players offering credit** Players demanding carbon credits

*Non-profit organizations, political figures, law firms, financial institutions. **Brokers, traders, commercial banks, brokers and direct buyers; tokenization platforms.

IN THE VOLUNTARY AND REGULATED MARKET

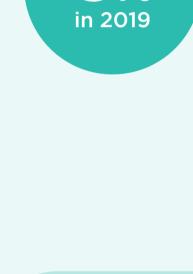


KEY:

Transversal players

EXPECTED DEMAND FOR BRAZILIAN CREDITS BRAZILIAN PARTICIPATION IN THE OFFER OF

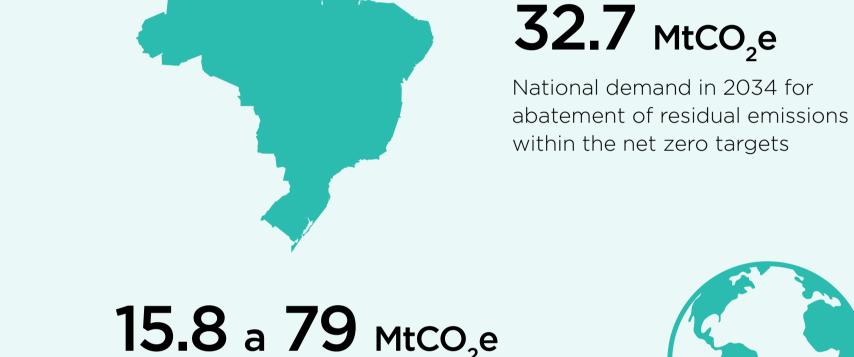
TRANSACTION POTENTIAL FOR BRAZILIAN CREDITS





of world credits

in 2021



(ARTICLE 6 MECHANISMS)



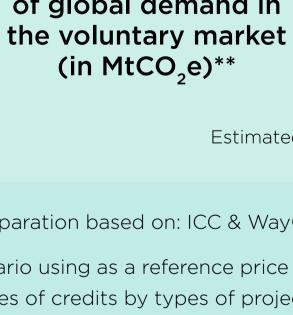
International demand in 2030 based on

estimates made by TSVCM and retired



Brazilian supply could Brazilian supply could cover up to 37.5% cover up to 22% of global demand in

UP TO US\$ 100 BILLIONS* IN 2030







Source: Own preparation based on: ICC & WayCarbon (2021), Forest Trends' Ecosystem Marketplace (2022), Carillo Pineda et al. (2020), TSVCM (2021), Edmonds et al. (2019). *Optimistic scenario using as a reference price of USD 100 dollars, considered by the Taskforce on Scaling Voluntary Carbon Markets as necessary to reach the Paris Agreement target of limiting global warming to 1.5°C.

NATIONAL ECOSYSTEM ASSESSMENT

Brazilian supply could **Brazilian supply** cover up to 48.7% could cover up to 28% of global demand in of global demand in the voluntary market the Article 6.4 (in MtCO₂e)***



BARRIERS

POLITICAL

BARRIERS

• Lack of credibility of government

• Low representation in decision-

• Limited coordination ability;

commitments:

making spaces.

BARRIERS • High complexity of projects; • Low training of the workforce; • Difficulty in guaranteeing the quality • Difficulty in estimating soil organic carbon;

MARKET

of credits:

Lack of transparency;

• Low market maturity.

Source: Own preparation.

DEMAND PLAYERS

TECHNICAL

BARRIERS

• Lack of methodologies adequate

to the characteristics of Brazilian

climate and soils.



- Greater market competitiveness, given the Paris Agreement.
- Investment in carbon projects aiming at compensation and residual emissions and surplus commercialization.

• Immediate preference for lower abatement cost projects, such as short-term avoided

international front opened by article 6 of the • Consideration of NBS with important and higher added value projects.

OPPORTUNITIES



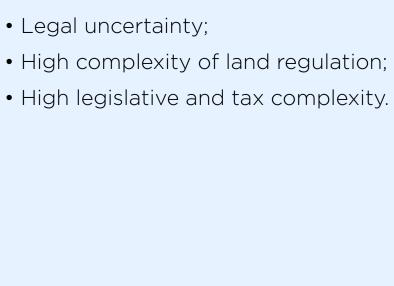
• Exploration of new fronts to be regulated

internationally.

• Positioning for greater performance of

financial institutions as financiers.

• Carbon market as an investment vehicle for the country, which can leverage the adoption of alternatives and less carbon intensive solutions.



BRAZILIAN GOVERNMENT

• Leverage strategies to monitor results

of NBS projects and achieve their NDC

more cheaply

Source: Own preparation.

REGULATORY

BARRIERS



ECONOMIC

BARRIERS

• Uncertainties about demand:

adjustment mechanisms;

• Unexpected effects of boundary

• Intensified opportunities from the evolution of Brazilian legislation with the regulation of carbon markets. • Great potential for NBS possible Brazilian positioning as a major supplier of NBS credits, internationally.

deforestation, medium-term reforestation, and long-term carbon capture and storage.

• Greater relevance and strengthening of Jurisdictional REDD with the launch of the ART Trees registry program. • Exploitation of sectors whose potential for emission reductions has been little explored and developed, such as waste treatment.

RECOMMENDATIONS

Establish the regulated market through a law;

balance that carbon markets offer;

Develop and publish a plan for compliance with the NDC and commitments to zero deforestation and reduce methane emissions: After planning for the NDC, establish the strategy for selling credits through the Article 6 market mechanisms, considering using credits from more complex projects and their potential as a supplier of NBS credits; Accountability of the Interministerial Committee on Climate Change and Green Growth in the carbon markets agenda; Encourage and support the development of methodologies that consider the country's

- designated authority;
- defend the adoption of digital technology for MRV and carbon credit certification processes with voluntary programs; Actively contribute to periodical publications prepared by entities experienced in the
- Include and give greater visibility to the participation of local populations; Invest in projects that generate co-benefits;
- that involve planting forests;
- Ensure efforts so that the reduction of GHG emissions and removals are not carried out only in forestry projects, but also in projects of other scopes that are still little explored

State Governments must strengthen their technical bodies in the areas of carbon

the Forest Code:

the carbon markets;

- markets, REDD+ and Jurisdictional REDD+.
- Make commitments in line with Science-Based Goals and outline concrete strategies;

Promote the potential for economic development, social equity, and ecological

Prioritize processes related to land regularization and other regulatory obstacles to

enable the implementation of projects and move forward with the implementation of

Take advantage of the preparation towards a regulated market in Brazil initiated by

the Decree to enable a number of institutional measures for the good operation of

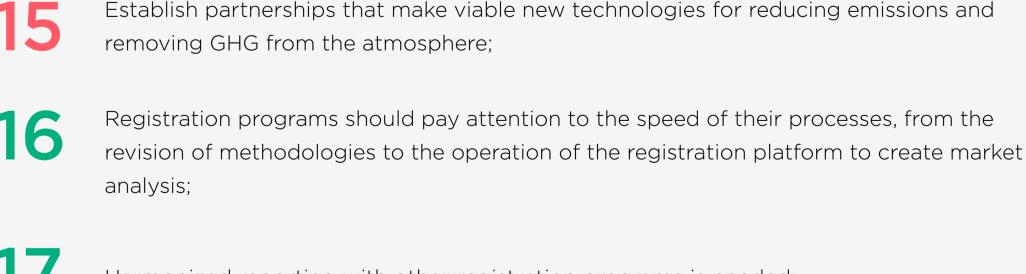
- Expand its operations in the market by proposing and financing carbon projects;
- Expand efforts to reduce and remove GHG emissions by investing in technological development and innovation; Establish partnerships that make viable new technologies for reducing emissions and
 - Harmonized reporting with other registration programs is needed; It is suggested the creation of methodologies focused on national climatic
- **OPPORTUNITIES FOR BRAZIL IN CARBON MARKETS** CARBON

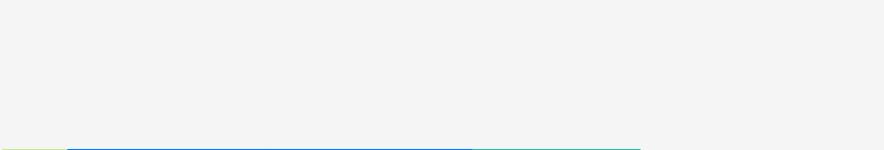




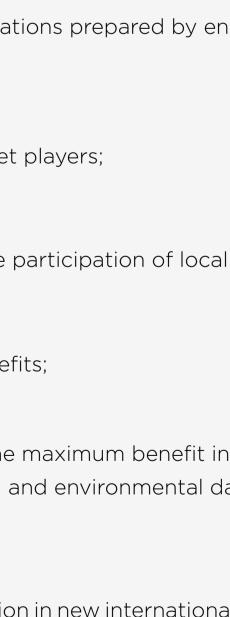








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characteristics.

GENERAL RECOMMENDATIONS Support the simplification of credit transaction processes in the voluntary market and subject; Establish partnerships with other market players;

FOR THE BRAZILIAN GOVERNMENT

climate reality;

FOR THE PRIVATE SECTOR

res for implementation;

EDERAL EXECUTIVE BRANCH

DEMAND PLAYERS

nationally; Support the development of the market through the exchange of knowledge and NDARDS

18

Invest in NBS, which must guarantee the maximum benefit in terms of sustainability and regeneration, besides minimizing social and environmental damage, prioritizing projects Take advantage of opportunities for action in new international mechanisms;

practices for the maturity of the agenda;