BRAZIL'S NDC

National determination to contribute and transform

BRAZILIAN GOVERNMENT



UNITING AND REBUILDING

BRAZIL'S VISION FOR 2035

Brazil's Nationally Determined Contribution (NDC) to the Paris Agreement sets out the country's vision for 2035. A vision of a country that acknowledges the climate crisis, recognizes the urgency of building resilience, and draws a roadmap for a low-carbon future for its society, its economy and its ecosystems. In it, Brazil imagines itself a decade from now, uniting society, economic sectors and federal entities to carry out the National Pact for Ecological Transformation, based on equity, science and ancestral knowledge.

As it renews its role as a key climate player, Brazil experienced tragedies in 2023 and 2024 that prove that climate change is already upon us. The country suffered droughts in the Amazon and extreme rainfall in its cities, including the floods that hit Rio Grande do Sul and its capital, Porto Alegre. Our nature has been punished by forest fires, which have affected the Amazon, Cerrado and Pantanal biomes. Those most affected by these sad episodes have been vulnerable segments of the population. This reinforces the need for the Brazilian state to respond by speeding up the implementation of the country's project enshrined in the 1988 Federal Constitution, the "Citizen Constitution". It is urgent to catalyze efforts to overcome socio-economic vulnerabilities, in the context of sustainable development and of efforts to address poverty, hunger and inequalities. Resilience and long-term climate ambition depend on social cohesion. In an undertaking involving the whole-of-government, whole-of-society and whole-of-economy, we will promote common but differentiated responsibilities also at the domestic level - responsibilities that empower and leverage response abilities. The climate crisis will not paralyze nor divide us; on the contrary, we will be facing it in unity and mobilization.

Our vision for the country in 2035 is one of "Climate Justice". Brazil combats climate change by advancing its constitutional aspiration of full enjoyment of fundamental rights and the respect for the principle of human dignity. In this vision, the country includes its citizens in a new paradigm of economic prosperity while protecting its biodiversity. In Brazil's ecological transformation, people, economy and nature achieve harmonious synergy through the regeneration of our forests, agriculture, industry, cities and communities. By regenerating ourselves, our social fabric and economic model, we will reconnect with our ancestry, elevating Brazil to its vocation as an agricultural-forestry, clean energy and neo-industrial powerhouse. The digital and bioeconomy transformations will take place here, unified with the ecological transformation into a single revolution. A giant by its very nature, fundamentally creative and diverse in its essence, Brazil identifies itself at the forefront.

Brazil's NDC is the synthesis of the country's determination to contribute to a global mobilization against climate change. Building on the legacies and presidencies of the Earth Summit (Rio-92, 1992), the Rio+20 Conference (2012) and COP30 (2025), Brazil invites the international community to revive the spirit of collective aggregation that marked the conception of the "Rio Conventions" and "Agenda 21". Brazil's NDC reflects the country's trust in itself. Above all, it reflects trust in humanity's ability to unite in diversity, to recognize itself in interdependence and to transform itself to win the fight against climate change - our common enemy.

THE PACT FOR ECOLOGICAL TRANSFORMATION

Among the three branches of the Brazilian State

In an unprecedented initiative, the Executive, Legislative and Judicial branches have established the Pact for Ecological Transformation between the three branches of the Brazilian State. The Pact is a clear demonstration that Brazil's vision of ecological transformation is a long-term State commitment. Established by Decree 12.223, of October 14, 2024, the instrument represents a commitment among the three branches to act harmoniously and cooperatively to adopt a set of actions and measures aimed at the objectives of (i) ecological sustainability; (ii) sustainable economic development; (iii) social, environmental and climate justice; (iv) consideration of the rights of children and future generations; and (v) resilience to extreme climate events.

The Pact enshrines ten commitments from the heads of the three branches of the Brazilian State, together with 26 priority issues, organized into three axes, as follows:

Commitments

- I give priority to legislative proposals related to the themes of the Pact;
- II accelerate territorial and land-use planning to incorporate, digitize, update and facilitate access to the inventory of public and private lands in the country, as well as to guarantee the protection of specially protected territorial spaces, including conservation units and indigenous lands:
- III to accelerate the process of a just energy transition, through investments in the decarbonization of the energy matrix, acquisition and production of clean technologies and incentives for low-carbon agriculture, as well as the improvement of economic instruments for sustainable development, the creation of jobs related to the economies of nature, including the bioeconomy, and incentives to reduce deforestation and forest fires and to recover degraded and deforested areas:
- IV to promote economic activities that generate quality work and are compatible with the conservation of the ecological diversity of Brazilian biomes;
- V promote investment in research, development and use on a commercial scale of production processes based on low carbon and low environmental impact technologies; VI to ensure the com petitiveness of the Brazilian economy, with care for the structural balance of public accounts, the conservation of biomes and national biodiversity and the potential for industrial and agricultural production with low carbon emissions;
- VII draw up and review climate change adaptation plans, formulating effective interinstitutional, national and local adaptation and resilience strategies, including measures related to extreme weather events, with a view to protecting the population, especially the most vulnerable groups, communities and regions;
- VIII to promote measures for celerity and legal certainty in administrative procedures and judicial proceedings around environmental and climate matters, including cases of deforestation, land disputes, conflicts related to the use of natural resources, environmental infractions and reparations for environmental and climate damage at the domestic level;

- IX implement management measures under the responsibility of each branch to reduce the direct impacts of its activities on the environment, such as reducing the demand for natural resources, energy efficiency, proper waste disposal and support for the implementation of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs); and
- X to ensure that the branches have the appropriate institutional structure and capacities to make the implementation of the Pact's actions and measures feasible.

Axis I - Territorial and land-use planning

- 1. effective integration of existing real estate, environmental, registry and tax databases, with georeferenced and up-to-date data on all public and private land in the country, based on the development of interoperability solutions, under the management of the Public Authority, as well as the obligation for database holders to provide relevant information, assigning a unique identification code and disseminating the data in an open, free and accessible format;
- 2. incorporation of federal assets, using geotechnologies to promote land-title regularization, reduce and combat deforestation and protect territories of public and strategic interest to the country;
- 3. formulation, implementation and evaluation of policies and instruments to speed up the processes of validation and strengthening of the Rural Environmental Registry (CAR) of the Forest Code (Law No. 12,651, 2012) and of environmental regularization by subnational entities;
- 4. improving inter-federative management for compliance with the Forest Code and tools for registration, validation and inspection of public and private protected areas and ecosystems, with technological integration within the CAR;
- 5. adoption of measures to prioritize the conclusion of legal proceedings related to land conflicts, the use of natural resources, the application of environmental sanctions, the investigation of environmental infractions and environmental civil liability;
 - 6. promoting measures to tackle the land regularization liabilities of conservation units;
- 7. improving territorial, indigenous and environmental monitoring and protection using new technologies, instruments to promote the protection of biomes and inter-institutional cooperation and coordination measures; and
- 8. the creation of a judicial policy to encourage the digitization and typing of books and other land registry documents in territories with a higher rate of deforestation and environmental damage.

Axis II - Energy transition

- 9. Approval of the legal framework and regulation of the carbon market, with the creation of the Brazilian emissions trading system, which sets limits for greenhouse gas emissions and encourages the decarbonization of productive sectors and investments in new low-carbon technologies;
 - 10. approval of the legal framework and regulation of offshore wind energy production;
 - 11. approval of the legal framework and regulation of low-carbon hydrogen production;

- 12. approval of a legal framework and regulation for the production of sustainable aviation fuel;
- 13. approval of the legal framework and regulation of the activity of capturing and storing carbon dioxide:
- 14. approval of a legal framework and regulation of the production and distribution of synthetic fuels to reduce greenhouse gas emissions; and
 - 15. adoption of measures to increase the use of biofuels in the Brazilian energy matrix.

Axis III - Sustainable development with social, environmental and climate justice

- 16. Using the state's institutional capacity and purchasing power to foster innovation, the reduction of inequalities and sustainable development;
- 17. development of the Brazilian Sustainable Taxonomy, a national classification system that defines, objectively and on a scientific basis, activities, assets or categories of projects that contribute to climate, environmental or social objectives;
- 18. expanding financing, reducing the cost of credit and improving guarantee and insurance mechanisms for sustainable sectors, projects and practices, such as strengthening the Climate Fund by offering credit at more attractive rates and creating an exchange protection program for investments in ecological transformation;
- 19. promoting economic activities that generate quality work and are compatible with the conservation of the ecological diversity of Brazilian biomes, as well as encouraging reuse, recycling and waste reduction;
- 20. regulation and effective control of the gold chain and its inputs, to promote product traceability and curb illegal mining;
- 21. promoting public investment and encouraging private investment in research, development and commercial-scale use of production processes based on low-carbon technologies;
- 22. reviewing the National Plan for Adaptation to Climate Change (PNA) and encouraging the development of local adaptation and resilience plans, as well as the formulation of inter-institutional strategies for prevention, mitigation, preparedness, warning systems, management and response to disasters and extreme climate events, especially in communities and regions most vulnerable to the effects of climate change;
- 23. promoting environmental education and the continuous training of public agents, such as civil servants, managers, judges, conciliators and mediators, promoting the appropriate institutional capacities to deal with issues and conflicts related to socio-environmental and climate issues;
- 24. adopting measures to stimulate procedural celerity and guarantee the effectiveness of jurisdiction in lawsuits involving environmental issues;
- 25. adopting management measures by each branch to reduce the direct impacts of its activities on the environment, such as sustainable bidding, reducing the demand for natural resources, energy efficiency and proper waste disposal; and

26. adopting measures to ensure that the three branches have the appropriate institutional structure and capacities to make the implementation of the Pact's actions and measures feasible, including by expanding their effective presence in strategic regions for environmental demands.

COMMITMENT TO CLIMATE FEDERALISM

Between the Union, states and municipalities

Brazil established the Commitment to Climate Federalism, through Resolution No. 3 of the Federation Council, July 3, 2024, building on the CHAMP Initiative (Coalition for High Ambition Multi-level Partnerships), endorsed at COP 28 by 62 countries. This instrument defines the climate agenda as a priority for the executive branches in government decisions at each level of government and sets out the commitment for federal entities to develop climate plans, instruments and targets, to be adopted in a continuous, progressive, coordinated and participatory manner with all relevant actors.

The federal entities will make coordinated efforts to tackle the climate emergency, including actions to prevent and prepare for extreme events, and will endeavor to integrate climate policy into their short-, medium- and long-term planning instruments, with a view to promoting greater consistency of climate action within the scope of their government planning.

CONTEXT

Sustainable development and efforts to eradicate poverty

Brazil will continue to advance environmental protection, together with economic growth and social well-being, following up its key role in sustainable development ever since the United Nations Conference on Environment and Development (Rio de Janeiro, 1992), the United Nations Conference on Sustainable Development (Rio+20, 2012), and the 2030 Agenda and its 17 SDGs. The country will continue to adopt the multidimensional perspective that the implementation of the SDGs and the fight against climate change require. It will continue to use the 2030 Agenda as a basis for formulating public policies, under a balanced and integrated vision of sustainable development, in all its economic, social and environmental dimensions.

As of 2023, Brazil has placed renewed emphasis on promoting sustainable development. The Brazilian government has created an executive secretariat dedicated to the SDGs within the General Secretariat of the Presidency of the Republic; reactivated the National Commission on the SDGs with the aim of reinvigorating dialogue with civil society; launched SDG 18, which aims to achieving ethnic and racial equality in Brazilian society; presented its Voluntary National Review at the United Nations' 2024 High-Level Political Forum on Sustainable Development, outlining Brazil's progress on each of the 17 SDGs; and turned to innovative and synergistic approaches to simultaneously address the three dimensions of sustainable development, by launching, for example, the National Bioeconomy Strategy.

Although there is no hierarchy among the 17 SDGs, the 2030 Agenda highlights the eradication of poverty as a necessary condition for sustainable development. The Brazilian government has reflected this understanding in its domestic policies. In 2023 it relaunched the Bolsa Família welfare Program, which provides direct and conditional cash transfers, in coordination with other public policies. As Brazil's largest cash transfer program, Bolsa Família has contributed to combatting poverty, while internationally recognized for having lifted millions of families out of hunger, as well as promoting families' access to basic rights. Brazil equally acknowledges climate change as a major driver of poverty, while fighting poverty is essential to reducing vulnerability and building resilience among those most vulnerable people to climate impacts.

VISION IN SYSTEMS

Science and technology for decision-making and implementation

Addressing the climate crisis depends on a set of immediate and sustained global efforts to limit the increase in global average temperature to 1.5°C above pre-industrial levels. In preparing, communicating and implementing its new NDC, Brazil reaffirms its commitment to the best available science, including to systems thinking and the systemic vision that must inform the analysis of geophysical, ecological, social and economic systems - all of which complex adaptive systems of stochastic, non-linear and emergent behavior. In identifying both climate risks and solutions, the country recognizes climate change as a complex issue that requires holistic, cross-cutting, integrated and multidimensional treatment, considering the environment, economy and society in an interconnected and interdependent manner. In line with the SDGs, the country sees just transitions and the fight against hunger, poverty and inequality not only as imperatives of justice, but also as an indispensable condition for the legitimacy and sustainability of climate action and ambition in the long term.

Among the largest economies on the planet, Brazil plays a pivotal role in formulating policies aimed at accelerating climate action and at achieving the ultimate objective of the United Nations Framework Convention on Climate Change (UNFCCC) and the long-term goals of the Paris Agreement thereunder. The country guides the planning, formulation and implementation of climate policies by scientific evidence, both academic and based on traditional knowledge, to achieve effective results

In view of Brazil's goal of climate neutrality by 2050, the definition of the national greenhouse gas emissions target for 2035 was based on an integrated modeling exercise

using the BLUES model - Brazil Land-Use and Energy System model - developed by the Cenergia Laboratory at COPPE/UFRJ - Federal University of Rio de Janeiro. BLUES consists of a perfect-foresight optimization model, built on the MESSAGE platform - Model for Energy Supply Strategy Alternatives and their General Environmental Impacts. Future emissions trajectories were designed to meet the national climate targets already set for 2025, 2030 and 2050, with greater cost-effectiveness for the economy as a whole. These trajectories served as scientific input to inform decision makers about the possible routes to achieve emission neutrality in the long term and for defining the national greenhouse gas emissions target for 2035. It also provided indicative sectoral efforts, as well as for identifying and qualifying possible technological and regulatory transformations needed for Brazil to achieve its mitigation targets in the most cost-effective way. Brazil's National Mitigation Strategy, which will be detailed below, will be based on robust scientific methodologies and data, while aligning itself with the guiding principles of the country's Climate Plan. It will seek to optimize the allocation of resources, to maximize the mitigation results of implemented actions combined with the country's socio-economic development, and to accelerate the transition to a fair, prosperous, inclusive economy with net-zero greenhouse gas emissions by 2050.

Brazil has strengthened its institutional capacity for using science and technology in climate decision-making and implementation. To support climate policy with the best available science, the newly created **Scientific Advisory Board** will propose data, information and scientific evidence to the Interministerial Committee on Climate Change (CIM), will support the formulation, implementation, monitoring and evaluation of public policies on climate, and will contribute to public awareness and scientific dissemination related to climate change, to its causes, consequences and to mitigation and adaptation options. The **Brazilian Research Network on Global Climate Change** (Rede Clima) is represented on the Scientific Advisory Board.

System (DataClima+) to integrate information systems and produce high-quality climate information, whilst improving and streamlining the climate data management cycle, including data planning, collection, processing and analysis; information publication and sharing; and data preservation and reuse. In addition to serving as essential input for national decision-making, this climate information will be used to strengthen Brazil's climate transparency system, in response to the Modalities, Procedures and Guidelines (MPGs) of the Enhanced Transparency Framework (ETF) under the Paris Agreement. Brazil will also make use of tools for emissions accounting and projections based on implemented sectoral policies, such as the National Emissions Registry System (SIRENE) and the National Sectoral Policies and Emissions Simulator (SINAPSE).

Brazil will continue to promote the monitoring and control of deforestation and of forest degradation, supported by national technologies, such as the **DETER/PRODES** satellite monitoring systems of the National Institute for Space Research (INPE). Similarly, the Ministry of Management and Innovation in Public Services has been working on modernizing the National System of the Rural Environmental Registry (CAR). The National System will be integrated with other systems in Brazil's **digital public infrastructure** for guaranteeing effective compliance with the country's Forest Code. Fully operational, the CAR has the potential to consolidate itself as the world's largest **land use governance system**, covering all rural properties nationwide.

Brazil will disseminate knowledge and decision-making related to climate adaptation through the **AdaptaBrasil** platform, which plays a key role in analyzing increasingly integrated and up-to-date information on climate and climate risks. AdaptaBrasil already has eight strategic sectors available (Water Resources, Food Security, Energy Security, Health, Port Infrastructure, Geo-hydrological Disasters, Railway Infrastructure and Road Infrastructure) and three under development (Biodiversity, Indigenous Peoples and Coastal Zones), with present and future climate risk analyses covering risk indicators and their dimensions (Threat, Vulnerability and Exposure) also at sub-national level.

Recently completed, the Technology Needs Assessment for the Implementation of Climate Action Plans in Brazil (TNA_BRAZIL) will seek to develop national technological capacity while facilitating the analysis and prioritization of climate technologies to support the implementation of the SDGs and the Paris Agreement. The TNA has identified priority sectors and key technologies for meeting the NDC target: the incorporation and development of technologies related to floating photovoltaic solar energy; flex-fuel hybrid vehicles; electric vehicles (battery, fuel, ethanol); the use of agricultural and agro-industrial waste; photovoltaic solar stoves with induction; innovative materials for cement; precision agriculture; animal genetic improvement in beef cattle breeding; forestry and genetic improvement of native species; forestry with mixed plantations for restoration; and satellite monitoring. Technology development and transfer in the following areas can also be considered for the implementation of other mitigation and adaptation actions: means of quantifying reductions in greenhouse gas emissions by supplychain; fostering research and technological development; improving the emissions monitoring, reporting and verification system; generating information through climate, greenhouse gas emissions trajectory and economic modeling; implementing adaptation alternatives that do not intensify existing structural socioeconomic inequalities existing; incorporating new sustainable infrastructure models; systematizing monitoring and analyses of climate impacts and risks.

Brazil invites international partners for collaboration and investments in these areas.

Complex systems and scenarios planning: global cooperation and technological evolution

In response to the climate crisis, systems thinking and abiding by complexity science requires a model of collective leadership through mutual-empowerment and cooperation instead of competition, while recognizing that the whole of our efforts will be more powerful than the sum of their parts. In defining its nationally determined contribution to a global mobilization against climate change, Brazil acknowledges that future projections pertaining to complex systems are inherently uncertain, which calls for scenario planning. The translation of the new Brazilian NDC target into a range, instead of a fixed number, reflects both the ambition of the country, as well as the best scientific knowledge of scenarios planning, as appropriate for complex systems and a systemic vision.

In considering volatility, uncertainty, complexity, and ambiguity in elaborating future scenarios, Brazil assesses that the extent to which its climate ambition will be effectively implemented will highly depend on unpredictable factors that can emerge over the next decade until 2035, both at the national and international levels. These factors include levels of global cooperation, investment and technological development and diffusion. In a favorable international scenario of exponential growth in cooperation and technological diffusion, Brazil will be able to achieve the highest level of its climate ambitions. Conversely, a scenario of fragmented international cooperation could limit Brazil's potential to contribute to the objectives of the UNFCCC and its Paris Agreement.

Brazil calls on the international community to respond positively to its resolve to remain united in pursuit of the purpose and long-term goals ofin pursuit of the purpose and long-term goals of the Paris Agreement, in accordance with the outcomes of the Global Stocktake (GST) concluded at COP28 (Dubai, 2023). Brazil also recalls the GST recognition that Parties should cooperate on promoting a supportive and open international economic system aimed at achieving sustainable economic growth and development in all countries and thus enabling them to better to address the problems of climate change, noting that measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade.

PLANNING AND IMPLEMENTATION

Whole-of-government, whole-of-society, whole-of-economy

To implement its NDC, Brazil will rely on its national process of updating the National Plan on Climate Change (Climate Plan). Aligned with the Pact for Ecological Transformation between the three branches of the Brazilian State, the Climate Plan will take a central role in the coordination of policies and measures related to both mitigation and adaptation, while systematizing the ways to achieve Brazil's commitments to the UNFCCC and its Paris Agreement, in line with national objectives of sustainable development with social, environmental and climate justice.

Defined by the Interministerial Committee on Climate Change, Brazil's highest climate governance body, CIM, via Resolution 3 of September 14, 2023, the new Climate Plan will include: the "National Adaptation Strategy", with sixteen sectoral adaptation plans; the "National Mitigation Strategy", with seven sectoral mitigation plans; and a "Transversal Strategy", covering the following themes common to both adaptation and mitigation: (i) Just Transition; (ii) Socio-environmental Impacts; (iii) Means of Implementation; (iv) Education, Training, Research, Development and Innovation Capacity; and (v) Monitoring, Management, Evaluation and Transparency. The ongoing Climate Plan update is being been informed by robust scientific knowledge and broad intersectoral and government-society dialogue, with comprehensive participation by government agencies at different levels of government, the private sector, civil society and the scientific community. So far, more than 63 activities have been held, including coordination meetings, technical meetings and workshops, with more than 4,000 participants and more than 15,000 online views. In addition, a channel was created for direct citizen participation - the Participatory Climate Plan digital platform - with 23,000 hits and 1,200 proposals registered for the Climate Plan, as well as face-to-face events in all of the country's regions.

The Climate Plan will establish an integrated vision for the national climate agenda, engaging the federal government, states, the Federal District, and municipalities, along with civil society, the private sector, and the scientific community, in response to the climate crisis. Its general objective is to guide, promote, catalyze and monitor coordinated actions aimed at the transition to an economy with net-zero greenhouse gas emissions by 2050 and at the adaptation of human and natural systems to climate change, through short, medium and long-term strategies, in the light of sustainable development and climate justice. Alignment with the global sustainable development agenda is expressed in the Climate Plan by integrating the economic, social and environmental dimensions of development, combining climate mitigation and adaptation with the fight against hunger, poverty and inequalities, among and within countries, as well as the promotion of food, water and energy security, and the consideration of specific needs and special circumstances of developing countries.

Given Brazil's federative structure, the actions of sub-national entities will be fundamental to achieving Brazil's aspirations for 2035. The Climate Plan, in its "mitigation" and "adaptation" dimensions, is grounded on dialogue and cooperation between the federal government, states, the Federal District, and municipalities, based on their respective capacities and competencies, including the exchange of information, preparation of climate action plans at the different levels, definition of domestic targets, and climate implementation.

After concluding the National Adaptation and Mitigation Strategies, Brazil will elaborate specific sectorial plans (16 for adaptation and 7 for mitigation), together with cross-cutting plans, which are intended to be finalized around the mid 2025. These plans will include sector-by-sector contributions to national efforts towards the implementation of Brazil's 2035 NDC target. Sectorial plans will also include detailed action plans and necessary means of implementation. As with the national climate strategies, the sectorial plans will be elaborated in a highly participatory manner.

National Adaptation Guidelines and Objectives

The **National Adaptation Strategy** contains the guidelines for the design and implementation of adaptation actions at the federal, state and municipal levels:

- 1. promoting sustainable development in its many dimensions, considering strategic sectors and themes for the country, with a view to reducing inequalities and to a just transition;
- 2. promoting climate justice based on the dimensions of gender, race, ethnicity, age, social class and other factors that influence vulnerability;
- 3. promoting environmental protection, conservation and preservation, guided by the principles of precaution and prevention;
- 4. multilevel and transversal governance, with a view to coherence, synergy and complementarity between strategies, taking into account territorial specificities;
- 5. promoting transparency and participatory processes with society;
- 6. mainstreaming adaptation into policies, programs and projects that may be affected by climate change, including through structuring initiatives and a long-term perspective;
- 7. strengthening institutional capacities at the different levels of government, including those needed to access sources of funding for adaptation and other means of implementation;
- 8. promoting co-benefits between adaptation and mitigation of greenhouse gas emissions;
- 9. adoption of the best available knowledge, based on science, good sectoral and societal practices, traditional knowledge and other sources deemed appropriate;
- 10. integrating incremental and transformational actions, based on an understanding of climate-related risks and their multiple conditioning factors, with different time horizons and scales of execution:
- 11. promoting public awareness of climate change, its causes, consequences and approaches to risks reduction;

- 1.2. adopting Ecosystem-Based Adaptation (EbA) approaches, recognizing their potential to reduce climate risks and vulnerabilities in a systemic, flexible, socially just and cost-effective way, with mitigation co-benefits;
- 13. flexibility and adaptability of strategies, with context changes and revisions to the Plan to incorporate updates to the information and knowledge generated, as well as lessons learned.

The **National Adaptation Objectives** reflect the integration between global commitments and local needs and priorities:

- 1. increasing the resilience of populations, cities, territories and infrastructures in facing the climate emergency;
- 2. promoting sustainable and resilient production and regular access to healthy food of adequate quality and quantity;
- 3. promoting water security, making water available in sufficient quality and quantity for multiple uses, such as supply, production, energy and ecosystems;
- 4. protect, conserve and strengthen ecosystems and biodiversity and ensure the provision of ecosystem services;
- 5. safeguarding the health and well-being of populations while respecting the ways of life of traditional peoples and communities;
- 6. ensuring sustainable and affordable energy security;
- 7. promoting socio-economic development and reducing inequalities;
- 8. protecting cultural heritage and preserving cultural practices and heritage sites against climate-related risks:
- 9. strengthening the vital role of the ocean and coastal zone in tackling climate change.

Based on these guidelines, sixteen **sectoral and thematic adaptation plans** are being developed, incorporating awareness-raising, training and conceptual alignment actions on topics such as EbA, climate emergency, human mobility and climate justice. The plans are as follows: (i) agriculture and livestock; (ii) family farming; (iii) biodiversity; (iv) cities; (v) risk and disaster management; (vi) industry; (vii) energy; (viii) transportation; (ix) racial equality and combating racism; (x) traditional peoples and communities; (xi) indigenous peoples; (xii) water resources; (xiii) health; (xiv) food and nutritional security; (xv) ocean and coastal zone; and (xvi) tourism. The sectoral plans are being developed under the leadership of the ministries responsible for the respective agendas, covering five chapters: context, with a description of the importance of adaptation and the institutional arrangements for each sector/theme; a summary of the main impacts, risks and vulnerabilities associated with climate change; objectives, targets and actions linked to the national adaptation objectives, with identification of funding sources; a description of the drafting process, the players involved and responsibilities for implementing the plan; and the lessons learned, good practices and barriers identified in the process, with recommendations for the implementation phase and the plan's review cycles.

The Brazilian Climate Plan will include the topic of the Ocean and Coastal Zones for the

first time. Aware of the critical importance of oceans for sustainable development and regulation of climate stability, the Brazilian government will include related initiatives in the Adaptation Plan, such as the comprehensive Marine Spatial Planning and Integrated Coastal Zone Management, as well as "ProManguezal" (mangroves) and "ProCoral" (coral reefs) initiatives, which will serve as relevant policies for both mitigation and adaptation.

Mitigation Guidelines, Objectives and Priorities

The general objective of the **National Mitigation Strategy (ENM)** is to guide, promote and monitor coordinated sectoral and cross-cutting policies and actions that guarantee the achievement of the country's mitigation goals, while accelerating the transition to an economy with net-zero emissions of all greenhouse gases by 2050, in order to boost innovation, competitiveness, job and income generation, social and environmental equity and the integrity of natural ecosystems. Summarizing the national ambition in mitigation, its objective is broken down into national emission reduction targets for the entire economy, in the short, medium and long term, in line with the trajectory to achieve net-zero emissions of all greenhouse gases by 2050.

The National Mitigation Strategy presents ten guidelines to guide the preparation of sectoral mitigation plans and the construction of subnational climate action plans:

- 1. Alignment with national climate commitments made under the UNFCCC and its Paris Agreement, especially the targets set out in the Brazilian NDC and its updates, including the goal of net-zero greenhouse gas emissions by 2050;
- 2. Climate action based on scientific evidence. Planning based on robust science, with the use of advanced evaluation tools to draw up cost-effective long-term trajectories, supported by systemic analysis and scientific knowledge of complex systems;
- 3. **Integrated intersectoral approach.** Support and promotion of decarbonization activities and increased social and environmental sustainability in all sectors of the Brazilian economy, from an integrated perspective with national sectoral policies that relate to climate change mitigation;
- 4. **Just and inclusive transition**. Promoting climate mitigation actions with a systemic and long-term vision that leaves no one behind, and that considers the impact and response capacity of different social groups in the adoption and implementation of measures to reduce greenhouse gas emissions;
- 5. Articulation of incremental and transformational actions, based on an understanding of cost-effective long-term mitigation trajectories and climate-related risks and their multiple conditioning factors. Expanding and strengthening existing solutions that have a positive impact on mitigating greenhouse gas emissions, in conjunction with investment in all stages of the development cycle for new technologies aimed at this purpose;
- 6. Development, expansion, improvement and articulation of economic, regulatory and technological means of implementation, as well as training and capacity building for transformations;
- 7. Broad social participation in the Strategy's formulation, implementation, monitoring and evaluation, with the establishment of partnerships between the federal, state and municipal spheres, the productive sector, academia, social movements and civil society for the development and implementation of its actions;

- 8. Integrating the climate and digital transitions for a vision of the future. Taking advantage of the climate and digital transitions to leverage Brazil's comparative advantage in the digital transformation and in the development, diffusion and transfer of green and climate technologies and solutions for the different economic sectors, including new digital technologies and biotechnology, whilst providing productivity and competitiveness gains for the Brazilian economy;
- 9. Integration between the National Mitigation Strategy and the National Adaptation Strategy. Develop decarbonization policies and programs that also aim to increase the resilience of communities and ecosystems, while bringing adaptation co-benefits;
- 10. Articulation between sectoral mitigation policies and other public policies to generate co-benefits, such as biodiversity conservation, provision of ecosystem services, reduction of atmospheric pollution, generation of employment and income, reduction of social and regional inequalities, promotion of food, energy and water security, guarantee of the rights of traditional peoples and communities and indigenous peoples, among others.

In addition, the following **National Mitigation Objectives** were defined as the basis for establishing the most relevant lines of action for reducing greenhouse gas emissions, to which public and private investments and efforts should preferably be directed:

- 1. Ensuring the integrity of national biomes through the conservation, restoration and sustainable use of their ecosystems;
- 2. Encourage the widespread adoption of sustainable agricultural and livestock production models with low greenhouse gas emissions, guaranteeing food security for all;
- 3. Expand sustainable biofuel production, promote technological innovation and develop bioenergy-related value chains;
- 4. Increasing the participation of clean, renewable and low-carbon technologies and sources in the national electricity matrix, guaranteeing energy security and accessibility for all;
- 5. Encourage the replacement of fossil fuels by promoting the development and use of sustainable biofuels and electrification solutions:
- 6. Promoting circularity through the sustainable and efficient use of natural resources throughout production chains;
- 7. Leverage innovative, low-carbon solutions in national production and develop carbon capture, use and storage technologies in bioenergy production and in the fossil fuel sectors;
- 8. Encourage sub-national entities to adopt integrated and sustainable urban development
- 9. Generate jobs, income and productive inclusion in economic activities related to the decarbonization of the economy and sustainable development, promoting a fair, inclusive and sustainable socio-economic transition;
- 10. Transforming Brazil's comparative advantages into competitive advantages, making the country a provider of goods, services and climate solutions for a world in transition to low-carbon development models;

- 11. Undertake specific actions to mitigate non-CO2 greenhouse gases with a high impact on global warming;
- 12. Prioritize mitigation measures with the potential to generate co-benefits for adaptation and resilience to climate change and for sustainable development.

The national mitigation strategy will be accompanied by seven sectoral plans, which define actions, targets, implementation costs, means of financing, monitoring and evaluation. In the **land use and forestry sector**, Brazil will implement coordinated and continuous efforts to suppress illegal deforestation and increasingly encourage the preservation of native vegetation. This will require not only strengthening command and control measures, but also establishing positive incentives to make it economically advantageous to maintain and restore native vegetation on private rural properties. The restoration of native vegetation is a fundamental driver of this strategy. Restoration consists of nature-based removals that will allow the goal of net zero emissions by 2050 to be achieved. Among relevant instruments for implementing actions related to land use and forests are the Plans for the Prevention and Control of Deforestation in the Biomes - including the Legal Amazon (PPCDAm) and Cerrado (PPCerrado) - and the National Plan for the Recovery of Native Vegetation (Planaveg), which may be supported by payment of environmental services, carbon markets and other economic instruments.

In the agricultural sector, Brazil will continue to demonstrate that it is possible to sustainably expand agricultural production while guaranteeing food security and energy security through the sustainable production of biofuels. In doing so, the country will rely on two fundamental transformations: (i) the conversion of new areas primarily from degraded pastures whilst expanding the area of crops in integrated systems such as crop-livestock and crop-livestock-forest integration, and (ii) productivity gains in agricultural production systems, through greater migration to integrated systems and an increase in high productivity systems. In the agricultural sector, Brazil will implement the Plan for Adaptation to Climate Change and Low Carbon Emissions in Agriculture (ABC+ Plan), as well as other instruments such as the National Program for Strengthening Family Farming (Pronaf), the Bioeconomy Brazil Socio-biodiversity Program and the National Bio-inputs Program and the National Program for the Conversion of Degraded Pastures into Sustainable Agricultural and Forestry Production Systems (PNCPD), a new initiative that aims to convert low productivity pastures into agricultural areas over ten years.

In the energy sector, where the country already stands out for the high share of renewable sources in its energy matrix - 89.2% electricity mix and 49.1% in energy mix -, Brazil will seek to expand electricity generation with an increased share of technology and clean sources. This is a considerable challenge given the significant share of these resources in the national electricity matrix. In the medium and long term, it will seek to gradually replace the use of fossil fuels with electrification solutions and advanced biofuels - including Sustainable Aviation Fuels (SAF) -, as well as expanding biofuel production associated with carbon capture and storage to meet the demand for negative greenhouse gas emissions. Brazil will also prioritize the expansion of energy efficiency actions, the development of markets for low-carbon hydrogen as an alternative to the use of fossil fuels, and the feasibility of advanced technologies for the removal of CO2 from the atmosphere. The Brazilian energy sector boasts instruments such as the ten-year energy plans (PDEs) and the 2050 National Energy Plan (PNE), which provide a perspective for integrated There are also other important instruments for mitigating emissions by promoting the efficient use of energy and increasing the use of electricity and fuels from renewable sources, such as the National Energy Transition Plan, the National Biofuels Program (RenovaBio), the Fuel for the Future Program, the National Hydrogen Program and the Green Mobility-Mover Program.

In the **transportation** sector, Brazil will seek to mitigate greenhouse gas emissions in line with the energy sector, by replacing fossil fuels with electricity and biofuels. Electrification will also be a strong trend in this sector, requiring technological advances to adapt routes and expand the charging network. In addition to electrification and biofuels, hydrogen is expected to be used as an alternative in the transport sector by 2035, requiring investment in specific infrastructure. Moreover, improving infrastructure and adopting efficient driving practices will contribute to an immediate reduction in fuel consumption. The transportation sector encompasses the national and interstate transportation of passengers and cargo and is therefore intrinsically linked to the energy sector through the use of fuels and electricity. For each sub-sector - Civil Aviation, Railway Transport, Road Transport, Maritime Transport and Waterway Transport - Brazil has a set of specific instruments, involving regulatory agents and other bodies related to each of the transport categories.

In the cities and urban mobility sector, mitigation will involve sustainable urban development, active mobility and improving public transport, with the strong aim of reducing dependence on individual transportation. In parallel, the trends observed for urban mobility follow the logic of electrification and increased use of biofuels. In buildings, Brazil will seek progress in terms of energy efficiency and the evaluation of alternatives to the use of liquefied petroleum gas (LPG) and natural gas for cooking, such as biomethane. Furthermore, integrating sustainable urban development actions with nature-based solutions is a fundamental aspect of increasing the potential for greenhouse gas removals in Brazilian cities. Existing public policy instruments focus on modal shift towards public transportation and active mobility, as well as on promoting integrated and sustainable urban planning, such as the Green and Resilient Cities Plan.

In the waste sector, the greatest opportunity for mitigation will be in the reduction of methane emissions, combined with its capture and energy use. The waste sector is extremely important for guaranteeing access to basic rights for the entire population. Its expansion is necessary and can be carried out without a total increase in emissions, in particular by relying on technologies such as anaerobic digestion with CH4 capture, aerobic treatment, and replacing rudimentary pits and other direct disposal methods with sewage treatment plants. Emissions mitigation in the waste sector is aligned with the sector's main guiding policies - the National Basic Sanitation Policy and the National Solid Waste Policy, and their respective implementation plans - and their goals of universal access to basic sanitation and integrated, environmentally correct waste management.

In the **industrial** sector, Brazil will seek to reduce emissions intensity by progressively replacing fossil fuels with biofuels and electrification, while gradually adopting new technological routes for industrial processes with lower emissions and developing carbon capture technologies in certain industrial segments. The national production of biomaterials is additionally emerging as a mitigation solution that could also be a source of innovation and a differentiator for the national industry internationally. The replacement of fossil-based plastics with bioplastics serves as an example in this regard, given its significant impact on emission reductions. The industrial sector is also closely linked to the energy sector. The use of electricity and fuels by the national industry relies heavily on integrated planning to meet the sector's decarbonization demands, such as electrification and the expansion of the use of fuels from renewable and low-carbon sources. Allied to instruments aimed at mitigating emissions from energy use in industry, the New Industry Brazil (NIB) program stands out by charting the path for Brazilian industrial development until 2033, whilst stimulating the country's industrial development.

Low-carbon, climate-resilient industrial development

Brazil will leverage its path towards low-carbon and climate-resilient development for

the country's neo-industrialization. The "New Industry Brazil" program, Brazil's new industrial policy launched in January 2024, has six missions related to the ecological transition, increased autonomy, and modernization of the Brazilian industrial park. They include the agro-industry, health, urban infrastructure, information technology, bioeconomy and defense sectors. NIB's Mission 5 – "bioeconomy, decarbonization and energy transition and security to guarantee resources for future generations" has among its objectives to support the ecological transformation, to increase the share of biofuels in the transport energy matrix by 50%; and to increase the technological and sustainable use of biodiversity by industry by 1% per year. In addition, its decarbonization goal will be aligned with the goal of the Industry Mitigation Sector Plan of the National Climate Change Plan.

Brazil's ecological transformation will be more successful the better we foster the development of climate technologies and innovative entrepreneurship. Federal funding agencies such as the **Financier of Studies and Projects** (FINEP) and the **Brazilian Company for Industrial Research and Innovation** (EMBRAPII) have increasingly dedicated themselves to promoting innovation in sustainable segments such as renewable energies, the bioeconomy and the circular economy, among others. By supporting nascent sustainable **startups**, especially in the country's North and Northeast regions, the Brazilian government will continue to seek to link environmental entrepreneurship to the imperatives of economic growth and social well-being, in line with the SDGs.

Looking towards the future, Brazil has incorporated the sustainability dimension into its Brazilian Artificial Intelligence Plan for the period 2024 to 2028. The Plan recognizes artificial intelligence (AI) as a tool for leveraging Brazil's social and economic development. The country seeks to overcome technological gaps, understanding that the climate emergency cannot be tackled without advances in specific technologies that will prepare us for the future. To this end, Brazil welcomes international collaboration, from both public and private actors, to build endogenous technological capacities.

INCENTIVES AND MEANS OF IMPLEMENTATION

NDC as an investment platform

Ecological Transformation Plan

As an investment plan for Brazil's sustainable development, the Ecological Transformation Plan (ETP) will restructure the national economic dynamic to promote sustainable development, based on techn ological innovation and the rational use of natural resources. Supporting the implementation of the Climate Plan, the ETP will respond to mitigation and adaptation needs in the face of the climate crisis while repositioning the Brazilian economy in a new cycle of low-carbon economic growth. The Plan will increase economic productivity by generating decent work, promoting climate justice and reducing regional, gender and racial inequalities Actions envisaged in the ETP will encourage and support the development and incorporation of new technologies into production processes, especially in the strategic sectors for the transition to a green economy, in line with sectoral mitigation and adaptation plans under the National Climate Plan. The country will make use of its environmental and sustainability comparative advantages to promote technological densification of supply chains, as well as to expand and modernize the national production structure.

Brazil will promote actions aimed at generating quality, knowledge-intensive jobs, to increase workers' participation in national income. It will seek greater quality and complexity in

national income. It will seek greater quality and complexity in jobs generated in the economy, with a view to more equitable social distribution of productivity gains. Through the ETP, the country will seek to articulate measures to increase productivity, to generate more complex jobs and to create income alternatives compatible with environmental preservation, with a focus on the poorest and most vulnerable social groups, whilst raising the country's average income and quality of life of its population.

The ETP implementation will also seek regionally balanced development, taking advantage of the natural potential of each region to strengthen and technologically densify supply chains, especially in the country's North and Northeast regions, which currently have the lowest income levels. The Amazon and other biomes place Brazil among the countries with the world's greatest biodiversity, making it a promising powerhouse in the biotechnology sector, including in the development of new bio-inputs in the areas of health, pharmaceuticals and cosmetics.

By channeling means of implementation into the Climate Plan, the ETP will prioritize financial, regulatory, fiscal and tax, administration and monitoring mechanisms in the areas of sustainable finance, bioeconomy and agri-food systems, technological densification, energy transition, circular economy and new green infrastructure for adaptation. Through mechanisms under the ETP, Brazil invites the international community and non-state actors to contribute to the Brazilian effort with financial, technological and capacity-building resources. Supported by a global mobilization against climate change, Brazil can serve as an example in demonstrating that climate ambition can be a driver of socio-economic prosperity.

The instruments of the ETP aimed at promoting the implementation of the Climate Plan include:

- Sustainable Sovereign Bonds Sustainable Sovereign Bonds are debt instruments issued by governments on the international market with the aim of financing projects that generate positive environmental and/or social impacts. In September 2023, the Federal Government established the Sustainable Sovereign Bond Framework, a reference document containing the rules that Brazil must comply with in order to issue sustainable bonds, such as transparency in the definition and selection of the expenses to be financed and in the allocation of the funds raised, disclosure of qualitative and quantitative indicators measuring the environmental and/or social impacts of these expenses, among others. In November 2023, Brazil successfully launched a US\$ 2 billion sustainable sovereign bond issuance. In June 2024, these bonds were issued again, also for US\$ 2 billion, with the prospect of annual issuances. These operations will enable debt maturity extension and expansion of the existing investor base, in line with Brazil's public debt management strategy. The funds obtained from these issuances will be used to control deforestation, to conserve biodiversity, to replenish the National Climate Change Fund (Climate Fund), with a focus on renewable energy and clean transport, and to programs against poverty and hunger, such as the Bolsa Família, Continuous Payments Benefits (BPC) and the Food Acquisition Program. Beyond supporting sustainable projects, sovereign bond in Brazil will serve as a benchmark for new sustainable bonds by the corporate sector.
- Climate Fund: created by Law No. 12,114/2009, the Climate Fund was reformulated in 2023 to expand new lines of financing aimed at accelerating renewable energy, promoting sustainable urban mobility, encouraging energy efficiency in strategic sectors, developing clean technologies and protecting biodiversity. Funds are available in two forms: non-reimbursable, managed by the National Bank for Economic and Social Development (BNDES). A substantial part of these funds was raised in 2023 and 2024 with the issuance of the first Brazilian sustainable

sovereign bonds. Financing rates vary from 1% per year, in the case of native forests and water resources, to 8% per year, for solar and wind power generation, as defined by the National Monetary Council (CMN). Its differentiated rates and volume of resources project the Climate Fund as one of the main instruments for financing Brazil's ecological transformation in the short and medium term.

- Eco Invest Brasil Program: Brazil's Foreign Private Capital Mobilization and Currency Hedging Program (Eco Invest Brasil Program) was created in 2024 with the aim of establishing the structural conditions to overcome the challenges of attracting long-term foreign private investment and reducing the cost of capital. The Program's objectives are: (i) to foster and encourage sustainable investments in projects that promote ecological transformation, especially in the areas of technological densification, bioeconomy, energy transition, circular economy and green infrastructure and adaptation; (ii) to mobilize sustainable foreign private capital for the country's ecological transformation; and (iii) to support the development, liquidity and efficiency of the long-term foreign currency hedge market in Brazil. The program establishes a line of financing and involves the joint and coordinated action of the Ministry of Finance (MF), Ministry of Environment and Climate Change (MMA) and Brazil's Central Bank (BCB). The resources of the Eco Invest Line will be allocated through auctions to be held by the National Treasury Secretariat of the Ministry of Finance, aimed at authorized and qualified financial institutions, which will take on all the risks of the operations, including the credit risk. The Eco Invest Line will be subdivided into four financing lines, with specific objectives:
- 1) Blended Finance offers partial financing for credit operations aligned with ecological transformation that use fundraising abroad, fostering the integration of Brazilian companies with investors and the international financial system;
- 2) Long-Term Foreign Exchange Liquidity aimed at events of foreign exchange volatility that could compromise the company's or investor's liquidity. It aims to mitigate the challenges faced by companies with debts in foreign currency and revenues generated in Brazilian reais, in cases of significant devaluation, allowing for effective cash management and credit enhancement;
- **3)** Encouraging **Exchange Rate Protection -** supports the offer or viability of exchange rate derivatives or other financial assets, with the aim of partial or full mitigation of investors' exchange rate risk, thus attracting foreign direct investment for green projects;
- 4) Project Structuring for credit operations that finance sustainable studies and projects in specific sectors. Through this financing line, we hope to catalyze the development of major sustainable initiatives in Brazil, filling the current gap in the country's green project portfolio.
- Brazilian Sustainable Taxonomy: the Brazilian Sustainable Taxonomy (TSB) establishes a classification system that objectively and scientifically defines activities, assets and categories of projects that contribute to climate, environmental and social objectives, using specific criteria. The sustainable taxonomy provides a common terminology for companies, financial institutions, investors, regulators, governments and other stakeholders, coordinating investment decisions and the development of public policies. By offering robust and uniform criteria for categorizing projects, the sustainable taxonomy also facilitates the disclosure and monitoring of the use of resources mobilized by thematic sovereign bonds and currency protection instruments. The establishment of a sustainable taxonomy will also facilitate the introduction of differentiated regulatory incentives according to projects' sustainability. Its action plan, submitted for public consultation, was launched in December 2023, presenting in detail the objectives, principles and sectors of the taxonomy. The governance structure for taxonomy development is defined in

for public consultation at COP29. Its completion and start of implementation are scheduled for the second half of 2025.

- Tax Reform: in addition to other sustainable finance instruments, the Tax Reform initiated in 2023 also makes significant contributions to ecological transformation. A 2023 amendment of Brazil's Constitution promoted extensive restructuring and simplification of the country's consumption tax system. The National Regional Development Fund was created, with the aim of reducing regional and social inequalities, with resources that should prioritize projects and actions for environmental sustainability and the reduction of greenhouse gas emissions. The Tax Reform also provides for a "Selective Tax" on the production, extraction, sale or import of goods and services that are harmful to health or the environment. The Tax Reform regulations also give biofuels consumed in their pure form and for low-carbon hydrogen more favorable rates of taxation. In addition, incentives are provided for the purchase of waste and other materials destined for recycling, reuse or reverse logistics from individuals, cooperatives or other forms of grassroots organization.
- Brazil Platform for Climate Investments and Ecological Transformation (BIP): an initiative coordinated by the Ministry of Finance in partnership with the BNDES and other ministries, BIP aims to boost the financing of projects linked to the country's ecological transformation. BIP is structured around three key sectors: (i) Natural Climate Solutions; (ii) Industry and Mobility; and (iii) Energy. It also covers specific sub-sectors that contribute to sustainable development and the reduction of greenhouse gas emissions. The platform also prioritizes projects generating additional socio-economic benefits, such as job creation and technological densification, that are aligned with Brazil's climate neutrality goals by 2050. The Platform will connect Brazilian projects to an extensive network of financiers to help scale the mobilization of public and private resources, including the strategic and catalytic use of public capital to attract private investment. Brazil invites the international community to engage in the BIP, with a view to contributing to Brazil's ecological transformation.
- Brazilian Emissions Trading System (SBCE): the regulation of the carbon market is aimed at reducing greenhouse gas emissions and promoting low-carbon technological innovations, in order to provide new business opportunities and support the implementation of the National Policy on Climate Change and of international agreements signed by Brazil. The Brazilian Congress is considering a bill that provides for the creation of the Brazilian Emissions Trading System (SBCE), through which the distribution of annual greenhouse gas emission quotas among operators would be defined. These quotas will be auctioned off, and a large part of the revenue generated will go to the regulated entities themselves through the Climate Fund, encouraging decarbonization projects, low-carbon technological innovation and professional training for a sustainable economy. This allocation of resources reinforces the commitment to a just transition, which promotes economic growth and social inclusion, in sync with environmental goals.

Amazon Fund

As the world's largest fund for financing efforts to reduce emissions from deforestation and forest degradation (REDD+), the Amazon Fund had a total of R\$3.5 billion in internalized resources by the end of 2023 for efforts to prevent, monitor and combat deforestation, as well as promoting conservation and sustainable use of the Legal Amazon. Also in 2023, the fund achieved an unprecedented operating result, reaching the mark of R\$1.3 billion in committed resources in the year. Nine new projects were approved, worth R\$553 million, and two new public calls launched, worth R\$786 million - "Restaura Amazônia" and "Amazônia na Escola: Comida Saudável e Sustentável". The fund has a total portfolio of 107 projects contracted by 2023, with disbursements of around R\$1.8 billion to government bodies at federal, state and municipal level,

disbursements of around R\$1.8 billion to government bodies at federal, state and municipal level, as well as to third sector organizations

Supported projects contribute to results in four thematic axis aligned with the PPCDAm. The "monitoring and control" axis has the largest volume of resources invested, totaling R\$757 million (41%). It aims to strengthen the capacity of environmental agencies in the Legal Amazon to implement current environmental legislation, including efforts to prevent and combat forest fires. The "sustainable production" axis has also evolved significantly over the years, now accounting for 27% of the resources invested by the fund until 2023 (R\$509 million). It involves projects for the development of Amazonian socio-biodiversity production chains, including rubber (latex), seeds, handicrafts, manioc flour, cocoa, Brazil nuts, tourism, wood, honey, resin, soaps, oils, babassu and açaí. The "science, innovation and economic instruments" axis responds to 13% of the fund's resources. The "land-use planning" axis is responsible for 19% of the total resources earmarked until 2023. It includes support for consolidating the management of conservation units and implementing the National Policy for Territorial and Environmental Management of Indigenous Lands (PNGATI). By 2023, the fund had supported 196 conservation units and 101 indigenous lands, as well as helping to strengthen the management of 52 million hectares. Among other results, the funds made it possible to carry out 1,896 inspection missions, fight 32,837 fires and support sustainable production activities that benefited 233,000 people.

Tropical Forests Forever Fund (TFFF)

The TFFF is a new financing mechanism for maintaining forest areas proposed by Brazil during COP28. The Fund is a large-scale, performance-based mechanism that uses blended-finance to generate financial returns and reward investors, countries and populations for keeping their forests standing. The Fund pays countries that keep their forests standing. A percentage of these resources should be directed to indigenous populations and local communities that protect these territories, generating ecosystem benefits by preserving carbon stocks, conserving biodiversity, regulating the water cycle, among others.

TFFF was conceived to complement - rather than replace - existing instruments aimed at environmental preservation. Its operating model is similar to a fixed income fund whose returns are based on the sovereign bonds of countries and other assets that are rated "investment grade" by risk rating agencies. The surplus in relation to the financial return promised to investors will finance existing or new projects in 70 countries with tropical forests, based on the monitoring of areas by satellite imaging systems.

TFFF resources will initially come from countries' sovereign wealth funds and philanthropy, with subsequent mobilization of private resources, constituting capitalization of 125 billion dollars. The rules for functioning, operation, remuneration, monitoring and delivery of resources, among others, are being discussed and established together with the countries participating in the creation of the new financing instrument, both at the donor and at the recipient ends (provider of ecosystem services). Brazil hopes to launch the TFFF definitively during COP30 in 2025.

National Bank for Economic and Social Development (BNDES)

BNDES is committed to the fight against climate change by continuously aligning itself with the Paris Agreement under the UNFCCC, contributing to Brazil's climate neutrality by 2050 and boosting investments for a just climate transition in the country. With a long track record in the socio-environmental agenda, the bank has a unique position in public-private articulation aimed at developing and implementing relevant public policies and investments. BNDES is the world'slargest financier of renewable energy, playing a pioneering role in the expansion of

renewable sources such as wind and solar energy. It also manages the Climate Fund and the Amazon Fund.

- Arc of Restoration in the Amazon: an initiative announced at COP28 (Dubai, 2023), the "Arc of Restoration in the Amazon" aims to bring together countries, companies and governments to restore the most vulnerable area of the world's largest rainforest. The so-called "Arc of Deforestation", which is to be transformed into the "Arc of Restoration", is made up of fifty municipalities in seven states of the Brazilian Legal Amazon. The aim of the initiative is to restore 6 million hectares of forest by 2030 and 24 million hectares by 2050. In total, it is estimated that investments of around R\$200 billion will be needed, with the potential to generate up to ten million jobs in the region. To kickstart the initiative, BNDES launched in 2023 the "Restore the Amazon" call for proposals. With an operational model similar to that of the "Floresta Viva" initiative, the call selected three managing partners who will support the selection and monitoring of ecological restoration projects with native species and/or agroforestry systems in the seven states that make up the restoration arc. Priority will be given to projects in conservation units, indigenous lands, quilombola areas, settlements, undesignated public areas and family farms. Each managing partner will be responsible for a macro-region. Together, they will manage R\$ 450 million in non-reimbursable resources from the Amazon Fund. This amount is expected to leverage public and private resources for ecological restoration in the region. Aware that credit instruments will be fundamental to achieving ambitious targets, BNDES will seek to encourage the consolidation of agroforestry business models using resources from the Climate Fund. In addition to the R\$ 450 million from the Amazon Fund, R\$ 550 million from the Climate Fund is being made available to finance private investments within the scope of this initiative. The first credit operations of the Restoration Arc, in the amount of R\$346.8 million (R\$160 million of which came from the Climate Fund), were contracted in 2024 and mobilized more than R\$1 billion in investments.
- Conservation and restoration of marine and coastal biomes: aware of the critical importance of the oceans for sustainable development and in regulating climate stability, BNDES launched support initiatives for actions to recover native vegetation in mangrove and restinga areas in Brazil, coastal ecosystems of great ecological, social and economic importance, as well as for the conservation and recovery of shallow coral reefs and coral banks off the Brazilian coast.

JUST TRANSITIONS AND CLIMATE JUSTICE

Common but differentiated responsibilities within and among countries

For Brazil, just transitions and Climate Justice depend, from an international point of view, on respecting, on the one hand, equity and the principle of common but differentiated responsibilities and respective capabilities, and, on the other, SDG10, on reducing inequalities within and among countries. It is imperative that the global response to climate change contributes to reducing inequalities, both within and among countries. This is a prerequisite for leveraging the international community's collective capacity to respond, based on individual abilities that match socio-economic capacities and historical responsibilities for global warming.

The principle of common but differentiated responsibilities and respective capabilities is enshrined in the Rio Declaration (1992), the UNFCCC (1992) and its Paris Agreement (2015), the 2030 Agenda for Sustainable Development (2015), and, most recently, the "Pact for the Future" (September 2024). Hitherto applicable to international law, the principle can be adapted for internal application within countries to mobilize common but differentiated responsibilities also among non-state actors. Combined with SDG10, the domestic interpretation of the principle could mobilize climate ambition and action from actors with a larger "carbon footprint", as well as building resilience on behalf of more vulnerable segments of the population who are also those less responsible for the problem.

From the Brazilian domestic point of view, the National Policy on Climate Change, under review, will unprecedently incorporate the concepts of just transition and climate justice into its legal framework. Without prejudice to other definitions enshrined in the Brazilian legal system, Brazil considers as "just" the transition to a socio-economic development model with low greenhouse gas emissions and resilience to climate change, in the context of sustainable development and efforts to eradicate poverty. Promoting policies and measures to mitigate climate change and adapt to its adverse effects will have transformational consequences for the Brazilian society, potentially altering the current social and economic landscape. With the aim of reducing existing inequalities and avoiding the emergence of new ones. Brazil will pursue a systemic and longterm vision that leaves no one behind, and that considers the impact and response capacity of different social groups in the adoption and implementation of measures to tackle climate change. When conducting just transitions, the country will take into account differences between socioeconomic sectors, gender, race relations, geographic regions, among others, as well as equity and the principle of common but differentiated responsibilities and respective capabilities in light of national circumstances. Efforts will focus on reducing potential impacts on vulnerable groups, including in the transition of the workforce, food, energy and other socio-economic systems, the fight against hunger, poverty and inequalities within and among countries, in addition to climate justice and the fair allocation of transition incentives and costs.

Brazil will promote "climate justice", understood as an approach to addressing social, racial and gender inequalities, among others, while advancing human rights, and in particular the rights of indigenous and traditional populations, in the face of climate change, with special attention to vulnerable groups. The Brazilian state aims to go through the global climate transition considering not only national economic development priorities, but also social protection measures to reduce associated impacts, through broad dialogue and social participation. This means valuing traditional knowledge and local cultures, as well as the co-benefits of climate action with positive regional and/or sectoral socio-economic impacts resulting from the climate transition.

BRAZIL'S NDC TARGET FOR 2035

After a careful process involving analysis and consultation with federal ministries within the Interministerial Committee on Climate Change (CIM), Brazil is setting an economy-wide target of reducing its net greenhouse gas emissions by 59 to 67 percent below 2005 levels by 2035, which is consistent, in absolute terms, with an emission level of 1.05 to 0.85 GtCO2e, according to the most recent inventory data.

CLARITY, TRANSPARENCY AND UNDERSTANDING

Information to facilitate clarity, transparency and understanding of nationally determined contributions, referred to in decision 1/CP.21, paragraph 28

- 1. Quantifiable information on the reference point (including, as appropriate, a base year):
 - (a) Reference year(s), base year(s), reference period(s) or other starting point(s):

The reference year for Brazil's NDC is 2005.

(b) Quantifiable information on the reference indicators, their values in the reference year(s), base year(s), reference period(s) or other starting point(s), and, as applicable, in the target year:

The quantification of the reference indicator is based on the total net emissions of greenhouse gases (GHG) in the reference year of 2005 reported in the "National Inventory of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases not controlled by the Montreal Protocol". Brazil will adopt the latest National Inventory Report available and submitted to the UNFCCC by the time of the assessment of the results of the NDC. According to the latest inventory, net emission levels in 2005 were of 2.56 GtCO2e (GWP AR5) or 2.06 GtCO2e (GTP AR5).¹

(c) For strategies, plans and actions referred to in Article 4, paragraph 6, of the Paris Agreement, or polices and measures as components of nationally determined contributions where paragraph 1(b) above is not applicable, Parties to provide other relevant information:

Not applicable.

(d) Target relative to the reference indicator, expressed numerically, for example in percentage or amount of reduction;

The target for 2035 is a reduction on the range of 59 to 67 per cent compared to 2005 emissions, which is consistent with a reduction of 1.51 to 1.71 GtCO2e, according to the latest inventory data. This is consistent, in absolute terms, with an emission level of 1.05 to 0.85 GtCO2e (GWP AR5) or 0.85 to 0.68 GtCO2e (GTP AR5).

(e) Information on the data sources used to quantify the reference point(s):

National Inventory of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases not controlled by the Montreal Protocol.

(f) Information on the circumstances under which the Party may update the values of the reference indicators.

Information on emissions in 2005 and reference values may be updated and recalculated due to methodological improvements applicable to the inventories.

2. Time frames and/or periods for implementation:

(a) Time frame and/or period for implementation, including start and end date, consistent with any further relevant decision adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA):

Net emissions from 01/01/2005 to 31/12/2005 compared with net emissions from 01/01/2035 to 31/12/2035. Period for implementation from 01/01/2020 to 31/12/2035.

(b) Whether it is a single-year or multi-year target, as applicable.

Single-year targets in 2035.

3. Scope and coverage:

(a) General description of the target;

Economy-wide absolute targets, consistent with the sectors present in the National Inventory of Greenhouse Gas Emissions for 2035. The targets will be translated into policies and measures to be detailed and implemented by the Brazilian Federal government.

(b) Sectors, gases, categories and pools covered by the nationally determined contribution, including, as applicable, consistent with Intergovernmental Panel on Climate Change

CO2, CH4, N2O, SF6, perfluorocarbons (PFCs) and hydrofluorocarbons (HFCs).

(c) How the Party has taken into consideration paragraph 31(c) and (d) of decision 1/CP.21:

The same gases previously indicated in the 2015 iNDC and previous NDC communications have been maintained.

(d) Mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans, including description of specific projects, measures and initiatives of Parties' adaptation actions and/or economic diversification plans.

The National Adaptation Strategy under the Climate Plan includes among its guidelines the promotion of co-benefits between adaptation and the mitigation of greenhouse gas emissions.

4. Planning processes:

- (a) Information on the planning processes that the Party undertook to prepare its nationally determined contribution and, if available, on the Party's implementation plans, including, as appropriate:
- (i) Domestic institutional arrangements, public participation and engagement with local communities and indigenous peoples, in a gender-responsive manner;

Brazil's highest governance structure for dealing with climate change is the Interministerial Committee on Climate Change (CIM), a permanent ministerial-level collegiate body whose purpose is to monitor and promote the implementation of actions and public policies within the federal executive branch relating to the National Policy on Climate Change. The governance structure was established by Decree No. 11.550, of June 5, 2023, recently updated by Decree No. 12.040, of June 5, 2024, to include strengthened social participation through the creation of three Chambers: (i) Interfederative Articulation; (ii) Social Participation, and (iii) Scientific Advisory.

Under the coordination of the National Focal Point to the UNFCCC and the CIM, the drafting of the Brazilian NDC was based on the processes and results obtained from the review of the Climate Plan, an activity mandated by CIM Resolution No. 3 of September 14, 2023. The update of the Climate Plan was informed by the best scientific knowledge available and by a wide-ranging intersectoral dialog between government and society, with broad participation from government bodies at different levels of government, the private sector, civil society and the scientific community. The Brazilian government sought to ensure that the process of drawing up the Climate Plan was based on a model of participatory construction, involving federal government bodies and state, Federal District and municipal governments, the Legislative and Judicial branches of government, civil society, the private sector, academia, and indigenous peoples, traditional peoples and communities. The massive participation of society in the drafting of the Climate Plan took place through the Participatory Brazil Platform, which allowed Brazilian citizens to collaborate directly by sending proposals to the question "How can Brazil face climate change and reduce its impacts?". There were more than 23,000 participations, 1,200 proposals and 2,200 comments on the text of the Plan. The digital process was supported by face-to-face meetings, in which eight Brazilian cities hosted plenary sessions to engage civil society in sending proposals, answering questions about the process and publicizing the stages of drafting the Plan.

(ii) Contextual matters, including, inter alia, as appropriate:

a. National circumstances, such as geography, climate, economy, sustainable development and poverty eradication;

Geography

Brazil is continental in size (8,510,417.771 km2), with a great diversity of climatic regimes, a variety of natural attributes (soil, relief, vegetation and fauna) and one of the largest coastal zones in the world, with 10,900 km. These factors form a unique environmental composition, responsible for the formation of six major biomes - the Amazon (49.5%), the Cerrado (23.3%), the Atlantic Rainforest (13%), the Caatinga (10.1%), the Pantanal (1.8%) and the Pampa (2.3%). Together, Brazil's biomes comprise one of the greatest biodiversities on the planet.

Land conservation units make up 18.5% of Brazil's continental area (1,579,417.53 km²), while marine conservation units cover an area of 961,248.01 km², out of a total of 2,945 conservation units in the three administrative spheres. Indigenous Lands make up 13.8% of the national territory, with a total of 631 territories.

Population

The Brazilian population in 2022 numbered 203,080,756 people - an increase of almost 20 times in the last 150 years, since the first census was carried out in Brazil in 1872, with a significant increase between 1950 and 2010. Women make up the majority of the population, with 94.25 men for every 100 women, which accentuates the historical trend of female predominance. From

the age group 25 to 29, the female population becomes the majority in all regions of the country, intensifying at older ages, due to the lower mortality of women at these ages. In addition to regional inequalities and particularities, one point worth highlighting is the country's socio-cultural diversity. Different ways of life, cultural values and traditions coexist in the territory, represented by peoples and communities with their own characteristics. The indigenous population living in Brazil has practically doubled in 12 years, with a positive variation of 88.96%.

Socio-economic aspects

Brazil's human development index (HDI) for 2022 is 0.760, slightly above the world average. The index ranked 89th out of 193 countries, up two places from the previous year's ranking, but remaining in the high human development classification, with a 22% increase between 1990 and 2022. In 2022, 31.6% of its population was living in poverty, while 5.9% was in extreme poverty, amounting to 67.8 million people in poverty and 12.7 million in extreme poverty across the country. According to the World Bank's criteria for per capita household income, poverty is defined as an income of up to US\$ 6.85 per day, while extreme poverty is defined as an income of up to US\$ 2.15 per day. The importance of social programs in mitigating poverty and extreme poverty is clear for Brazil.

Government social programs contributed 67% of the household income of people in extreme poverty in 2022. Among poor households, social benefits comprise 20.5% of income. In the absence of these social programs, the situation would have exacerbated significantly, increasing the proportion of people in poverty and heightening extreme poverty and income inequality.

Economy and infrastructure

Brazil is a developing country with a complex and dynamic economy. It is characterized as an urban-industrial nation, where the agricultural sector plays a vital role in both the national and global economies. The country also boasts a clean electricity matrix and an energy sector that is transitioning toward a predominance of renewable sources.

Since 2000, Brazilian agribusiness has played a crucial role in supplying the domestic market and expanding into the international market, with notable production of coffee, sugar cane, soybeans, corn, cotton, and meat. This progress has been driven by modern technologies, efficient production systems, and innovations that have transformed the country's agricultural and livestock sectors. Encouraging research and technological development for sustainable tropical agriculture has enabled increased productivity per hectare, keeping pace with economic and population growth.

Brazilian industry is a fundamental pillar of the national economy and contributed 25.5% of the country's Gross Domestic Product (GDP) in 2023. Covering a wide range of segments, from manufacturing to advanced technology, its share of the trade balance is the most significant of all economic sectors, reaching 66.6% through the export of goods and services. In 2022, the industry's share of formal employment was 21.2%.

With regard to Brazil's energy matrix, the high share of renewable sources stands out, well above the global average. Over the last 20 years, the share of renewables in Brazil's Internal Energy Supply (IES) has remained at a high level, reaching 49.1% in 2023. For years, actions have been implemented to strengthen the energy matrix by investing in renewable sources. The diversification of the matrix, based on the development of wind and solar sources, has made it possible to ensure high levels of renewables in the internal energy supply, even with fluctuations in the supply of hydroelectric and other renewable sources.

Sustainable Development

Brazil has placed renewed emphasis on promoting sustainable development since 2023. The Brazilian government created an executive secretariat dedicated to the SDGs within the General Secretariat of the Presidency of the Republic; reactivated the National Commission on the SDGs with the aim of reinvigorating dialogue with civil society; launched SDG 18, which aims to achieve ethnic and racial equality in Brazilian society; presented its Voluntary National Review at the United Nations High-Level Political Forum on Sustainable Development 2024, outlining Brazil's progress on each of the 17 SDGs; and turned to innovative and synergistic approaches to simultaneously address the three dimensions of sustainable development, such as the bioeconomy, launching the Bioeconomy Initiative at the G20 and establishing the National Bioeconomy Strategy internally. Extending to the end of 2030, the 2030 Agenda for Sustainable Development has served as a basis for formulating public policies, under a balanced and integrated vision of sustainable development, in its economic, social and environmental dimensions.

Eradicating poverty

In line with the 2030 Agenda and its SDGs, Brazil believes that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge, without which there can be no sustainable development. Committed to fighting the problem, Brazil has relaunched the Bolsa Família Program at home and launched the Global Alliance against Hunger and Poverty at the international level. The Alliance will take concrete steps to integrate a set of established domestic public policy instruments that have proven successful in developing countries, including targeted cash transfers, school lunch programs, support for family farming and social security mechanisms. The program is open to all countries, which will have access to technical cooperation and financial resources, as well as international organizations, knowledge centers, development banks and funds, and philanthropic institutions. The Alliance represents Brazil's commitment to reversing setbacks in the achievement of SDG 1 ("poverty eradication") and SDG 2 ("zero hunger and sustainable agriculture"). Given their universal and comprehensive nature, the SDGs interact with the main global challenges: from the fight against poverty and hunger to combating climate change, including economic growth, gender equality and the promotion of equality. Brazil is fully committed to the realization of the 2030 Agenda through the multidimensional perspective that the implementation of the SDGs requires.

b. Best practices and experience related to the preparation of the nationally determined contribution;

Brazil's current NDC is the result of the experience gained and lessons learned from the Intended Nationally Determined Contribution (iNDC), submitted in 2015 to the multilateral climate change regime, and subsequent updates. Brazil has adopted a cross-cutting approach in the preparation of its NDCs, seeking to involve the whole government, the whole economy and the whole of society. The country also has robust climate governance, including the CIM, the PNMC and the Climate Plan for domestic implementation of its NDCs. Brazil's solid climate governance, with a strong emphasis on social participation and the role of the productive sector, has favored the involvement of the entire government, society and the economy in the process of designing and implementing the NDC. The legacy of Brazil's presidencies of the Earth Summit (Rio-92, 1992) and Rio+20 (2012), together with Brazil's traditional commitment to Agenda-21 and the strengthening of the global response to climate change under the UNFCCC, have contributed to the organic assimilation of the concept of sustainable development by Brazilian society and the private sector, with the emergence of a sophisticated domestic ecosystem geared towards sustainability.

c. Other contextual aspirations and priorities acknowledged when joining the Paris Agreement;

One of the constitutional principles guiding Brazil's international relations is "cooperation among peoples for the progress of humanity". In line with the conclusions of the GST (COP28, 2023), Brazil advocates for the critical role of multilateralism grounded in United Nations values and principles, including in the implementation of the Convention and its Paris Agreement. Brazil also emphasizes the importance of international cooperation in addressing global challenges, including climate change, in the context of sustainable development and efforts to eradicate poverty.

(b) Specific information applicable to Parties, including regional economic integration organizations and their member States, that have reached an agreement to act jointly under Article 4, paragraph 2, of the Paris Agreement, including the Parties that agreed to act jointly and the terms of the agreement, in accordance with Article 4, paragraphs 16-18, of the Paris Agreement:

Not applicable.

(c) How the Party's preparation of its nationally determined contribution has been informed by the outcomes of the global stocktake, in accordance with Article 4, paragraph 9, of the Paris Agreement:

Brazil's NDC target is based on projections from the BLUES integrated assessment model for a contribution that aligns the country's efforts with the objective of keeping the 1.50 C target within reach and on a path towards climate neutrality by 2050 (paragraphs 3 to 5 of decision 1/ CMA.5, on the outcomes of the first Global Stock take).

National policies to implement Brazil's NDC, including under the National Climate Plan, will contribute to accelerating climate action in this critical decade (paragraphs 5, 6, 31). Brazil's NDC includes an ambitious economy-wide emissions reduction target, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5° C, as informed by the latest science, in light of different national circumstances (paragraph 39). **Despite being a developing country under the Convention and its Paris Agreement, Brazil's NDC includes an absolute economy-wide emissions reduction target** (paragraph 38).

Brazil's climate policies and commitments are designed and implemented to contribute to the promotion of sustainable development and the fight against hunger, poverty and inequalities, within and between countries, strongly based on Climate Justice, just transitions and meaningful and effective social dialogue and the participation of all stakeholders (paragraphs 6, 9, 10). The National Climate Plan's mitigation and adaptation strategies are guided by broad social participation in their formulation, implementation, monitoring and evaluation. They include partnerships among federal, state, and municipal governments, the private sector, academia, social movements, and civil society to develop and implement climate change mitigation actions and to monitor and evaluate their implementation. To this end, monitoring and transparency mechanisms have been developed to enable independent agents to continuously assess the effectiveness and impact of policy measures.

The Brazilian NDC is therefore firmly based on the best available science, while reflecting equity and the principle of common **but differentiated responsibilities and respective capabilities** in the light of different national circumstances and in the context of **sustainable development** and efforts to **eradicate poverty** (paragraphs 6, 7).

Energy transition

Brazil will respond to the call to contribute to global efforts under paragraph 28 of decision 1/CMA.5, through the policies and national efforts below, including those under the National Climate Plan. In addition, Brazil would welcome the launching of international work for the definition of schedules for transitioning away from fossil fuels in energy systems, in a just, orderly and equitable manner, with developed countries taking the lead, on the basis of the best available science, reflecting equity and the principle of common but differentiated responsibilities and respective capabilities in the light of different national circumstances and in the context of sustainable development and efforts to eradicate poverty, as per paragraph 6 of decision 1/CMA.5.

In the energy sector, the National Climate Plan will provide details about the expansion of electricity generation and, in the medium to long term, the gradual replacement of the use of fossil fuels with electrification solutions and advanced biofuels. It also supports the expansion of biofuel production associated with carbon capture and storage to meet the demand for negative emissions. The choice to replace fossil fuels with biofuels allows potentially for the medium and long-term development of biofuel technology routes associated with CCS to produce negative emissions, since removals in the Land Use Change and Forestry sector alone will not be enough to offset the remaining emissions. This will depend, however, of the economic and technical feasibility of these new technologies in the medium and long term.

Brazil has maintained a solid trajectory of investments in the energy sector, with a focus on renewable sources, which places the country at the forefront of the global energy transition.

Thanks to the set of public policies and actions adopted by the country over the last decade, based on national energy planning efforts, in 2023 Brazil recorded an 89.2% share of renewable sources in its electricity mix, mainly influenced by hydropower plants and the expansion of wind and solar power over the last decade. In 2023 there was also a high share of renewable sources in the Brazilian energy matrix, which registered 49.1%, due to hydropower plants, biomass, wind and solar.

Although the country already has a high share of renewable sources in its electricity matrix, Brazil will continue to expand its electricity generation park through a wide range of mechanisms, including energy generation auctions, the free energy market and distributed generation. Furthermore, in view of the change in the profile of the country's electricity generation park over the last decade and its expansion over the next 10 years, two additional points should also be highlighted:

- maintaining the announcements for investments in the expansion of the country's energy transmission network, with the aim of increasing the security of power supply throughout the country and making the National Interconnected System increasingly resilient and capable of incorporating even more intermittent renewable sources (mainly wind and solar), made possible through the Electricity Transmission Grant Plan and the Electricity Transmission Auctions; and
- the internalization of new technological solutions to meet the system's power and flexibility requirements (such as stationary batteries and other storage technologies) in the medium-term horizon, by holding Capacity Reserve Auctions in the form of Power, which has been taking place in the country since 2021 in accordance with the criteria established by the National Council for Energy Policy (CNPE).

Although the energy transition is already a reality in the country, **Brazil is undertaking** clear actions that will make its second wave of the energy transition possible, with a focus on structuring the regulatory framework and implementing public policy instruments at the national level that will reduce emissions from sectors that are difficult to abate. This new perspective of action is important given the fact that the transport and industrial sectors, the country's main energy consumption centers, are the ones that reflect the highest greenhouse gas emissions profiles in Brazil today (accounting for 50.7% and 17.3% of GHG emissions respectively).

This new cycle of public policies has been implemented in line with the objectives of the national energy policy (established by Law No. 9.478 of August 6, 1997), with the technological advances made to date and with the international commitments made by Brazil, giving clear signals to make investments in sectors where emissions are difficult to reduce and giving the country a strategic position in the global energy market.

In this sense, it is worth highlighting the main legal and regulatory frameworks recently established by Brazil:

- the creation of the Energy of the Amazon Program (Decree No. 11.648, of August 16, 2023), with the aim of reducing the use of diesel oil in energy production, gradually replacing it with renewable sources in the Isolated Systems located in the Legal Amazon region and, consequently, reducing greenhouse gas emissions;
- the creation of the Green Mobility and Innovation Program Mover Program (Law No. 14.902, of June 27, 2024), which aims to support technological development, global competitiveness, integration into global value chains, decarbonization, alignment with a low-carbon economy in the productive and innovative ecosystem of cars, trucks and their road equipment, buses, chassis with engines, self-propelled machinery and auto parts;
- the approval of the Legal Framework for Low-Emission Hydrogen (Law No. 14.948 of August 2, 2024), which provides for the National Low-Emission Hydrogen Policy, its principles, objectives, concepts, governance and instruments, establishes incentives for the low-emission hydrogen industry, establishes the Special Incentive Regime for Low-Emission Hydrogen Production (Rehidro), creates the Low-Emission Hydrogen Development Program (PHBC);
- the approval of the National Energy Transition Policy by the National Council for Energy Policy (CNPE Resolution No. 5 of August 26, 2024), which establishes the National Energy Transition Plan (Plante) and the National Energy Transition Forum (Fonte) as its main instruments;
- the definition of guidelines to promote the decarbonization of oil and natural gas exploration and production activities, approved by the National Council for Energy Policy (CNPE Resolution No. 8 of August 26, 2024), with a focus on reducing methane emissions;
- the creation of a Working Group to assist the National Council for Energy Policy in proposing measures and guidelines for the national market for marine fuels, aviation fuels and liquefied petroleum gas, approved by the National Council for Energy Policy (CNPE Resolution No. 10 of August 26, 2024);
- the constitution, at the national level, of a source of funds for the energy transition based on the use of low-emission hydrogen (Law No. 14.990, of September 27, 2024), as the object of the Low-Emission Hydrogen Development Program (PHBC); and
- the approval of the Fuel for the Future Law (Law No. 14.993, of October 8, 2024), which

provides for the promotion of sustainable low-carbon mobility and the capture and geological storage of carbon dioxide; establishes the National Program for Sustainable Aviation Fuel (ProBioQAV), the National Green Diesel Program (PNDV) and the National Program for Decarbonization of Producers and Importers of Natural Gas and Incentives for Biomethane.

To pursue a just and inclusive energy transition, Brazil is committed to promoting equity and social participation, minimizing negative impacts on communities, workers, companies, and social segments vulnerable to transformations in the energy system, while maximizing opportunities for socioeconomic development, increasing the competitiveness of the productive sector, and combating inequalities and poverty at the domestic level. The National Energy Transition Plan aims at supporting the National Climate Plan by assigning the actions needed to promote the energy transition across two or more economic sectors in the country, covering aspects such as the legal-regulatory framework, the opportunities for investments and financing, as well as the social dimension of the policies that are going to be considered.

It is also worth noting that Brazil has implemented policies that see the technological challenges of this second wave of the energy transition, which endorses the need for greater investment in research, development and innovation (RD&I) in the country. Through CNPE Resolution No. 2/2021, the CNPE defined a set of seven priority themes for the country (hydrogen, nuclear energy, biofuels, energy storage, technologies for sustainable thermoelectric generation, digital transformation and strategic minerals for the energy sector), culminating in the targeting of resources for RD&I that are operationalized by the regulatory agencies that operate in the energy sector.

Brazil, as a developing country, has one of the lowest per capita energy-related emissions in the world (2.0 tons of CO2-equivalent in 2023), which reflects that the country still has opportunities to promote the expansion of energy services for its population while maintaining its energy matrix with a high share of renewables.

As a developing country, Brazil still has to deal with the challenge of guaranteeing universal access to energy for its population. To ensure that Brazil's energy transition is fair and inclusive, progress must be made in combating energy poverty, in line with Sustainable Development Goal (SDG) 7, which is one of the country's main needs and priorities for the coming years.

Although it is very close to guaranteeing universal access to electricity, mainly through the Light for All Program, for its population (reaching 99.8% of the Brazilian population by 2022), Brazil still faces pressing challenges in promoting access to clean technologies for cooking food (with around 6.7% of the country's population still using firewood and other rudimentary methods in 2022), with considerable regional levels of inequality still being recorded in the country. To address this issue, Brazil has proposed the creation of the LPG for All Program (Bill No. 3.335/2024), which aims to guarantee access to LPG cylinders for more than 20 million families in the coming years.

Reducing deforestation and forest restoration

Brazil will continue to respond positively to paragraphs 33 and 34 of decision 1/CMA.1. The policies related to the Climate Plan foresee coordinated and continuous efforts to achieve zero deforestation, by eliminating illegal deforestation and compensating for the legal suppression of native vegetation and the greenhouse gas emissions resulting from it. This will require not only strengthening and deepening existing command and control measures, but also instituting positive economic incentives for maintaining forests on private rural properties. Forest restoration will be a key factor in Brazil's strategy, as it consists of the nature-based removal of greenhouse

gases from the atmosphere and, at the same time, allows the goal of climate neutrality by 2050 to be achieved. The main public policy instruments for mitigation in the Land Use Change and Forestry sector include:

- Action Plan for the Prevention and Control of Deforestation in the Legal Amazon (PPCDAm);
- Action Plan for the Prevention and Control of Deforestation in the Cerrado Biome (PPCerrado):
- Action Plans for the Prevention and Control of Deforestation in the Atlantic Forest, Pantanal, Caatinga and Pampa Biomes;
- National REDD+ Strategy (ENREDD+);
- Land Regularization Law (Law No. 11.952/2009 and Decree No. 10.592/2020);
- National Policy for the Recovery of Native Vegetation (Decree 8.972/2017) / National Plan for the Recovery of Native Vegetation - Planaveg.

The main recent results of the PPCDAm, PPCerrado and PLANAVEG are as follows:

PPCDAm

In 2024, Brazil reduced deforestation rates in the Brazilian Amazon by 30.6% in relation to 2023. In 2023, the country had already achieved a reduction of 22.3%, in relation to 2022. This corresponds to a consolidated reduction rate in deforestation of 45.7%, which represents Brazil's best performance since 2015. These positive results are due to the coordinated effort to implement the PPCDAm, which was resumed as one of this government's priorities. The main actions include:

- Resumption of the Amazon Fund as a financing strategy for efforts to combat deforestation, with a further 22 projects (R\$3.8 billion) sent by the PPCDAm Subcommittee to the BNDES.
- Resumption and increase of IBAMA and ICMBio inspection actions with the institution of remote embargoes.
- Creation of the Union with Municipalities program, which provides for transfers of up to R\$785 million for environmental efforts if there is a reduction in deforestation, with an estimated R\$600 million from the Amazon Fund, plus R\$130 million from Floresta+. Within the program, 48 municipalities have already signed the Adhesion Agreement.
- Approval, in 2023, by the Technical Chamber for the Allocation of Federal Rural Public Lands, of a further 9.5 million hectares for studies of new Conservation Units or forest concession areas.
- Increased strictness in prohibiting access to rural credit in illegally deforested areas in all biomes (CMN Resolution No. 5,081 of June 29, 2023).

PPCerrado

In 2024, Brazil achieved a reduction of 25.7% in deforestation rates in the Brazilian Cerrado, compared to 2023. In reversing the trend of deforestation in the Cerrado, the Brazilian government has been working on strategic actions, among which the following stand out:

- Launch of the PPCerrado in November 2023, with its four lines of action (sustainable production activities, environmental monitoring and control, land and territorial planning, regulatory and economic instruments).
- Increase in remote embargoes by Ibama, for areas with illegal deforestation above 0.5 km² (50 hectares), while the average for the biome is 5 km² (500 hectares).
- Intensified inspection. From August 2023 to July 2024, Ibama registered 733 infraction notices, 449 embargoes and 124 seizure notices. More than R\$ 225 million were collected in fines during the period. ICMBio registered 85 infraction notices, 135 embargoes, 98 seizure notices and 28 destruction notices. Fines amounted to R\$16 million.
- Creation of a task force to combat illegal deforestation with ministers and governors of the Cerrado states.
- Involvement of agribusiness leaders in the strategy to combat deforestation in the Cerrado.
- Actions to increase transparency and integration of data on Vegetation Suppression Authorization (ASV) and differentiate between legal and illegal deforestation, in order to plan effective control strategies.
- Definition of priority municipalities for actions to combat illegal deforestation (action in progress).
- Increased strictness in prohibiting access to rural credit in illegally deforested areas in all biomes (CMN Resolution No. 5,081 of June 29, 2023).

PLANAVEG

The National Plan for the Recovery of Native Vegetation (PLANAVEG) has been updated, with a new version approved in October 2024. In this effort, 11 meetings of the Thematic Advisory Boards of the National Commission for the Recovery of Native Vegetation (CONAVEG), 40 bilateral meetings and 5 technical-scientific seminars were held, involving more than 50 institutions and organizations. PLANAVEG continues to aim to expand and strengthen public policies, financial incentives, markets, recovery technologies and other measures needed to achieve the recovery of 12 million hectares by 2030.

With PLANAVEG as the backdrop for coordinating policies, programs and initiatives on the forest recovery agenda, significant results have been achieved in recent years. The design of the monitoring system and definition of the baseline for the recovery of native vegetation were planned and agreed between the main partners (INPE/MCTI, SFB, ICMBio, IBAMA and MGI). In addition to modeling the second phase of the Restore the Amazon program with the BNDES, three calls for proposals for phase 2 of Restore the Amazon were launched, in line with PLANAVEG, directing R\$ 450 million from the Amazon Fund for this purpose. The National Commission for the Recovery

of Native Vegetation (CONAVEG) was resumed and implemented, holding its first meeting in November 2023. Three Thematic Consultative Chambers (CCTs) were set up on the following topics: Recovery Economics, Spatial Intelligence and Monitoring, and PLANAVEG Implementation Arrangements. The Restaura Biomas project was drawn up as part of the GEF-8 Integrated Restoration Program. The project, worth U\$ 14.6 million, aims to support the strengthening and implementation of PLANAVEG.

Adaptation

In terms of adaptation to the adverse impacts of climate change (paragraphs 43-65 of decision 1/CMA.5), national adaptation planning has been summarized and is being consolidated in the National Adaptation Strategy, along with 16 Sectoral Thematic Plans drawn up by sectoral ministries. Through this set of planning instruments, Brazil will seek alignment with the Global Goal on Adaptation (GGA) defined in Article 7.1 of the Paris Agreement, which consists of increasing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, contributing to sustainable development and ensuring an adequate adaptation response in the context of the Paris Agreement's temperature goals.

The effective implementation of the National Adaptation Strategy will include incorporating the climate adaptation perspective - through parameters and criteria for the analysis of climate risks and vulnerabilities, for example - into the development of policies and programs by federal, state and municipal bodies, as well as private sector initiatives and civil society organizations. This implies reviewing, reorienting and resizing policies, programs and initiatives. Given the magnitude of the challenges for adaptation, Brazil will implement new actions specifically aimed at achieving the objectives and targets defined in this strategy and in its sectoral and thematic plans.

Need for means of implementation

Recognizing that finance, capacity building and technology transfer are critical enablers of climate action, Brazil's Ecological Transformation Plan and its financial mechanisms provide unprecedented vehicles to channel international cooperation and financial, technological and capacity building resources from both public and private sources (paragraph 8). Brazil invites the international community and non-state actors to contribute to Brazil's ecological transformation by engaging through support and investments in mechanisms such as the Sustainable Investment Platform for Ecological Transformation (Plataforma Brasil Invest, BIP) and Eco Invest Brasil. Through these mechanisms, Brazil is responding positively to the provisions of Decision 1/CMA.5 on financing (paragraphs 66-100), technology development and transfer (101-110), capacity building (111-120) and international cooperation (153-163).

For the implementation of mitigation and adaptation actions, Brazil calls on the international community to fully implement the provisions of the GST related to the means of implementation, including on financing (paragraphs 66-100 of decision 1/CMA.5), technology development and transfer (101-110) and capacity building (111-120). Brazil also looks forward to multilateral progress and international cooperation on the topics of Loss and Damage (paragraphs 121-135 of decision 1/CMA.5) and Response Measures (paragraphs 136-152 of decision 1/CMA.5).

Commitment to strengthening multilateralism

Brazil reaffirms its commitment to multilateralism, especially in light of the progress made under the Paris Agreement. The country also reaffirms its determination to contribute to uniting the international community around the pursuit of efforts to achieve the purpose and long-term objectives of the Agreement (paragraph 153, decision 1/CMA.5). Responding

positively to the International cooperation (paragraphs 153-163) and Guidance and way forward (paragraphs 164-196) provisions of the GST, Brazil's commitment to strengthening multilateralism and global climate governance is also reflected in the designated presidency of COP30, in which Brazil worked with the presidencies of COP28 and COP29 to advance the "Road map to Mission 1.5". Brazil's engagement in the "troika" of COP presidencies of Mission 1.5, with the aim of strengthening international cooperation towards ambition for the next round of NDCs, was preceded by the consolidation of Brazilian ambition at the national level. At the international level, Brazil assumed the presidency of the G20 at the end of 2023, under the motto "building a just world and a sustainable planet", incorporating climate change solutions into both the sherpa and financial tracks. In addition to the Working Groups on Environment and Climate Sustainability and on Energy Transitions, Brazil proposed the Bioeconomy Initiative and the Task Force for the Global Mobilization against Climate Change (TF-CLIMA). In an unprecedented initiative, TF-CLIMA brought together the ministries of Foreign Affairs, Finance, Environment/Climate and central banks to integrate the climate and financial agendas, including through structural solutions for national actions and to align international financial flows with the Paris Agreement. Regionally, Brazil hosted the "Amazon Summit" in August 2023, bringing together the leaders of the eight signatory countries of the Amazon Cooperation Treaty. The Summit resulted in the adoption of the Belém Declaration, establishing a new common agenda for regional cooperation in favor of the sustainable development of the Amazon, combining the protection of the biome and the river basin, social inclusion, the promotion of science, technology and innovation, stimulating the local economy and valuing indigenous peoples and local and traditional communities and their ancestral knowledge.

Following paragraph 154 of the GST, Brazil expects partners, especially developed countries, to "cooperate on promoting a supportive and open international economic system aimed at achieving sustainable economic growth and development in all countries and thus enabling them to better address the problems of climate change, noting that measures taken to combat climate change, including unilateral measures, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade."

- (d) Each Party with a nationally determined contribution under Article 4 of the Paris Agreement that consists of adaptation action and/or economic diversification plans resulting in mitigation co-benefits consistent with Article 4, paragraph 7, of the Paris Agreement to submit information on:
- (i) How the economic and social consequences of response measures have been considered in developing the nationally determined contribution:

Not applicable.

(ii) Specific projects, measures and activities to be implemented to contribute to mitigation co-benefits, including information on adaptation plans that also yield mitigation co-benefits, which may cover, but are not limited to, key sectors, such as energy, resources, water resources, coastal resources, human settlements and urban planning, agriculture and forestry; and economic diversification actions, which may cover, but are not limited to, sectors such as energy, resources, water resources, coastal resources, human settlements and urban planning, agriculture and forestry; and economic diversification actions, which may cover, but are not limited to, sectors such as manufacturing and industry, energy and mining, transport and communication, construction, tourism, real estate, agriculture and fisheries.

With the publication of CIM Resolution No. 3, of September 14, 2023, temporary working groups were created with the mission of drawing up the National Mitigation and Adaptation Strategies. In all, sixteen thematic sectoral adaptation plans are being drawn up: (i) agriculture and livestock, (ii) family farming, (iii) biodiversity, (iv) cities, (v) risk and disaster management, (vi) industry, (vii) energy, (viii) transportation, (ix) racial equality and combating racism, (x) traditional peoples and communities, (xi) indigenous peoples, (xii) water resources, (xiii) health, (xiv) food and nutritional security, (xv) ocean and coastal zone and (xvi) tourism; and seven sectoral Mitigation plans: (i) land use change and forests, (ii) agriculture and livestock; (iii) cities, including urban mobility; (iv) energy, including electricity, mining and fuels; (v) industry; (vi) waste; and (vii) transportation. Linking sectoral mitigation and adaptation policies with other public policies should generate, in addition to reducing emissions, co-benefits such as: biodiversity conservation, provision of ecosystem services, reduction of atmospheric pollution, generation of employment and income, reduction of social and regional inequalities, promotion of food security, energy security and water security, guarantee of the rights of traditional peoples and communities and indigenous peoples.

- 5. Assumptions and methodological approaches, including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals:
- (a) Assumptions and methodological approaches used for accounting for anthropogenic greenhouse gas emissions and removals corresponding to the Party's nationally determined contribution, consistent with decision 1/CP.21, paragraph 31, and accounting guidance adopted by the CMA:

Brazil will update its national inventories for the historical series based on the 2006 IPCC Guidelines or any subsequent guidelines that may come to replace them.

(b) Assumptions and methodological approaches used for accounting for the implementation of policies and measures or strategies in the nationally determined contribution;

Brazil will also apply specific assumptions and methodologies, when appropriate, when assessing progress made under the policies and measures related to the implementation of its NDC in its Biennial Transparency Reports (BTRs).

(c) If applicable, information on how the Party will take into account existing methods and guidance under the Convention to account for anthropogenic emissions and removals, in accordance with Article 4, paragraph 14, of the Paris Agreement, as appropriate;

5 (a) above.

(d) IPCC methodologies and metrics used for estimating anthropogenic greenhouse gas emissions and removals;

Emissions of gases covered by Brazil's NDC are calculated based on the 2006 IPCC Guidelines. The methodological tier to be employed will depend on the availability of data in the different sectors. Brazil applies at least tier 2 methodologies for the key categories identified.

Emissions of the covered gases are aggregated in terms of the 100-year time-horizon global warming potential (GWP-100), based on the values stipulated in the IPCC Fifth Assessment Report or 100-year time-horizon global warming potential values subsequently determined by the IPCC, as agreed by the CMA.

Consistent with Decision 18/CMA.1, Brazil also employs the global temperature potential (GTP), an accurate metric for assessing the contribution of different gases to climate change.

- (e) Sector-, category- or activity-specific assumptions, methodologies and approaches consistent with IPCC guidance, as appropriate, including, as applicable:
- (i) Approach to addressing emissions and subsequent removals from natural disturbances on managed lands;

This approach will still be defined and subsequently informed.

(ii) Approach used to account for emissions and removals from harvested wood products;

Brazil uses the atmospheric flow approach, according to the 2006 IPCC Guidelines, to estimate emissions and removals of timber forest products (HWP) because it is more representative for the national context.

Even so, in order to meet the transparency criteria of the Paris Agreement (paragraph 56 of Decision 18, CMA1), Brazil also presents the results from the production approach as supplementary information.

(iii) Approach used to address the effects of age-class structure in forests;

This approach will still be defined and subsequently informed.

- (f) Other assumptions and methodological approaches used for understanding the nationally determined contribution and, if applicable, estimating corresponding emissions and removals, including:
- (i) How the reference indicators, baseline(s) and/or reference level(s), including, where applicable, sector-, category- or activity-specific reference levels, are constructed, including, for example, key parameters, assumptions, definitions, methodologies, data sources and models used;

Brazil does not use any other assumptions or methodological approaches.

(ii) For Parties with nationally determined contributions that contain non-greenhouse-gas components, information on assumptions and methodological approaches used in relation to those components, as applicable;

Not applicable.

(iii) For climate forcers included in nationally determined contributions not covered by IPCC guidelines, information on how the climate forcers are estimated;

Not applicable.

(iv) Further technical information, as necessary;

Not applicable.

(g) The intention to use voluntary cooperation under Article 6 of the Paris Agreement, if applicable:

The Government of Brazil estimates that it is possible to raise the ambition of its national mitigation actions beyond the base level of 59 percent below 2005 levels by 2035 or 1.05 GtCO2e, as proposed in section 1b, through the international transfer of mitigation results (ITMOs) generated in its territory. This estimate is based on the opportunity to attract timely and largescale investments in activities and new technologies with significant abatement and opportunity costs, while also enabling the country to leverage and accelerate its trajectory towards net-zero emissions. These are, therefore, efforts that are the responsibility of Brazil, given its common but differentiated responsibilities and respective capabilities, in light of national circumstances and the parameters of justice and equity, as detailed in section 6. Any international transfers of mitigation results obtained in Brazilian territory will be subject to the prior and formal authorization by the federal government, strictly observing the appropriate terms and conditions, including the applicable regulations or those to be developed nationally for this purpose, and will also be subject to the corresponding adjustments and reporting in accordance with articles 6 and 13 of the Paris Agreement and the decisions of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA) under the UNFCCC. In these terms and taking into account the urgency of promoting long term investments in reducing and removing emissions, such transfers may be authorized up to the level of 59 percent below 2005 levels by 2035 or 1.05 GtCO2e, as indicated in section 1b, followed by the necessary corresponding adjustments.

Furthermore, for the purposes of Article 4.3 of the Paris Agreement, especially with regards to the progression of NDCs, the Brazilian government considers the base level of 59 percent below 2005 levels by 2035 or 1.05 GtCO2e, as indicated in section 1b as a reference for assessing the progress and ambition of future contributions. This commitment to progression aims not only at the continuous expansion of mitigation efforts, but also at fulfilling international guidelines for the accounting and transparent reporting of mitigation results, contributing to greater environmental integrity and confidence in the global climate cooperation system.

6. How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances:

(a) How the Party considers that its nationally determined contribution is fair and ambitious in the light of its national circumstances;

The IPCC 6th Assessment Report recognizes that "global greenhouse gas emissions have continued to increase [since the industrial revolution], 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". Brazil notes that most of the current concentration of greenhouse gases in the atmosphere is the result of historical and ongoing emissions, driven primarily by developed countries. While the world faces the consequences of past emissions, the actions we take today will profoundly impact the climate for centuries to come. It is essential that our global response to climate change is both fair and equitable, linking cause (anthropogenic greenhouse gas emissions) with effect (temperature rise and climate disruption).

The global mean surface temperature increase, primarily due to historical emissions, remains a critical metric for setting upper limits to prevent dangerous anthropogenic interference with the climate system. However, we must recognize that the responsibility for emissions, and thus the obligation to act, is not equal across all countries. It must consider differing starting points,

approaches, economic structures, resource bases, and technologies.

Brazil's commitment to mitigating climate change, reflected in its new NDC, goes far beyond what could be expected based on the country's historical responsibility for global temperature rise. The ambition, scale, and scope of Brazil's efforts are in line with, if not surpassing, those of the developed countries most historically responsible for climate change. In alignment with the principles of equity and common but differentiated responsibilities enshrined in the Paris Agreement, Brazil's new NDC reflects its highest possible ambition. This marks a progression beyond its previous commitments, demonstrating Brazil's leadership in contributing to the global climate effort, while ensuring that its actions are consistent with national capabilities and its development needs.

In terms of respective capabilities and national circumstances, Brazil, as a developing country, still faces outstanding socioeconomic challenges. Combatting poverty, hunger and inequalities stands as a topmost priority for the Brazilian government, while the country faces much higher costs of capital and less fiscal space than developed countries to finance its just transition towards low-carbon and climate-resilient development.

In addressing these barriers, Brazil welcomes the determination of G20 countries to "lead bold, timely and structural actions in our national economies and in the international financial system with a view to accelerating and scaling up climate action, in synergy with sustainable development priorities and efforts to eradicate poverty and hunger", as part of TF-CLIMA ministerial statement. Brazil expects the G20 to follow-up on its commitment to "cooperate and join efforts with a view to identifying and addressing structural barriers to foster private capital flows to climate action, particularly for developing countries[,recognizing] that relevant institutions should work to ensure that risks are well captured, including by exploring to increase the transparency of credit ratings and country risk assessments." Noting that finance, capacity-building and technology development and transfer are critical enablers of climate action, and that public finance plays a significant role, G20 ministers also underscored the need for increased international collaboration and support, including with a view to scaling up climate finance and investment for developing countries, accelerating broadly accessible technological innovation, enhancing resilience and low-greenhouse-gas emissions pathways and supporting ambitious green industrial planning and strategies. The G20 further underlined "the importance of progress towards making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development." Brazil expects the international community to significantly progress in all these areas in the next decade.

Brazil's ambitious commitment for 2035 underscores its resolve to contribute to the global mobilization against climate change, in the spirit of a dynamic approach to historical responsibility. Consistent with the principles of fairness and climate justice, Brazil has come forward in its NDC with ambitious, economy-wide, absolute emission reduction targets, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5° C, as informed by the latest science, in the light of different national circumstances.

(b) Fairness considerations, including reflecting on equity;

As presented in the above section on "Just Transitions and Climate Justice - Common but differentiated responsibilities within and among countries", justice considerations form the cornerstone of Brazil's NDC, from the perspectives of climate justice and just transitions, which are to be incorporated into the National Climate Change Policy, currently under review. Reflecting equity at both international and domestic levels, Brazil's NDC is informed by the principle of

common but differentiated responsibilities and respective capabilities, while ensuring that climate ambition and action contribute to reducing inequalities between and within countries, in line with he Rio Declaration, the UNFCCC and its Paris Agreement and the 2030 Agenda (SDG 10).

(c) How the Party has addressed Article 4, paragraph 3, of the Paris Agreement:

Brazil's mitigation targets surpass previous NDC communications, representing progression over time and its highest possible ambition. Brazil's mitigation efforts are of a type, scope and scale that surpass that of several developed countries, which are the most responsible for climate change. Though coherent with its national circumstances and capabilities, the level of ambition of this NDC is much higher than what would correspond to Brazil's socio-economic capacity and marginal relative responsibility for the increase in global average temperature.

For the purposes of complying with Article 4.3 of the Paris Agreement, in particular regarding measuring the progress of subsequent NDCs in relation to this NDC, the base level of 59 percent below 2005 levels by 2035 or 1.05 GtCO2e should be taken as a reference.

(d) How the Party has addressed Article 4, paragraph 4, of the Paris Agreement:

Despite being a developing country, Brazil has adopted an absolute target covering the entire economy since its iNDC in 2015. Brazil also has a climate neutrality target by 2050.

(e) How the Party has addressed Article 4, paragraph 6, of the Paris Agreement:

Not applicable.

- 7. How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2:
- (a) How the nationally determined contribution contributes towards achieving the objective of the Convention as set out in its Article 2;

"The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner." (Article 2 of the Convention)

In demonstrating Brazil's commitment to the ultimate objective of the Convention, the climate ambition under the Brazilian NDC goes beyond what would be expected for a developing country, reflecting equity and the principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances and in the context of sustainable development and of efforts to eradicate poverty. Brazil's NDC target is also accompanied by solid implementation mechanisms, notably the National Climate Plan and its Mitigation and Adaptation Strategies, as well as the Ecological Transformation Plan. Together, domestic policy and implementation mechanisms are aimed at accelerating and scaling-up climate action in Brazil, involving the whole of government, society and economy.

A significant Brazilian contribution to "the stabilization of greenhouse gas concentrations in the atmosphere" will be the large-scale restoration of native vegetation. Forest restoration has the immediate potential to allow for massive removals of greenhouse gases from the atmosphere, thus contributing to stabilizing their concentrations. As part of a global mobilization against climate change, Brazil invites the international community - countries, companies, governments and other public and private actors - to join hands with the Brazilian society around the National Plan for the Recovery of Native Vegetation (PLANAVEG) and "Arc of Restoration in the Amazon". If fully implemented, the "Arc of Restoration in the Amazon" could restore over 24 million hectares, with estimated needed investments of around R\$200 billion that could generate up to ten million jobs in the region.

Brazil also recognizes its role in food production and food security worldwide. Together with a renewed focus on achieving the SDGs, Brazil's implementation of the Plan for Adaptation to Climate Change and Low Carbon Emissions in Agriculture (ABC+ Plan) will serve as a key contribution "to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner", in line with the ultimate objective of the Convention.

(b) How the nationally determined contribution contributes towards Article 2, paragraph 1(a), and Article 4, paragraph 1, of the Paris Agreement.

Recognizing the climate urgency, Brazil is committed to contributing to a global mobilization against climate change towards the ultimate objective of the Convention and the long-term goals of the Paris Agreement, including under Article 2, paragraph 1(a). Brazil fully subscribes to the temperature goals of the Paris Agreement, while underscoring that the impacts of climate change will be much lower at the temperature increase of 1.5° C compared with 2° C. Brazil reiterates its resolve to pursue efforts to limit the temperature increase to 1.5° C, as the risks science alerts us to in terms of global warming exceeding the Paris Agreement temperature goals are humanly intolerable for the Brazilian society - and for humanity as a whole.

Following the GST, Brazil recognizes that limiting global warming to 1.5 °C with no or limited overshoot requires deep, rapid and sustained reductions in global greenhouse gas emissions of 43 per cent by 2030 and 60 per cent by 2035 relative to the 2019 level and reaching net zero carbon dioxide emissions by 2050 (decision 1/CMA.5, paragraph 27). Brazil recalls that the GST also "note[d] with concern the pre-2020 gaps in both mitigation ambition and implementation by developed country Parties and that the Intergovernmental Panel on Climate Change had earlier indicated that developed countries must reduce emissions by 25–40 per cent below 1990 levels by 2020, which was not achieved" (decision 1/CMA.5, paragraph 17).

Under the principles and provisions of the Convention and its Paris Agreement, Brazil's NDC is aligned with the 1.50 C goal, in the context of sustainable development and of efforts to eradicate poverty, while reflecting equity and the principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances. Despite being a developing country, Brazil has come forward in its NDC with an ambitious, economywide, absolute emission reduction target, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5 C, as informed by the latest science, in the light of different national circumstances. Brazil's NDC target involves a substantive reduction in the country's emissions, in absolute terms, which implies Brazilian emissions have already peaked, surpassing what mandates Article 4, paragraph 1, of the Paris Agreement for a developing country.

Aligned with GST, Brazil "notes with significant concern that, despite progress, global greenhouse gas emissions trajectories are not yet in line with the temperature goal of the Paris Agreement, and that there is a rapidly narrowing window for raising ambition and implementing existing commitments in order to achieve it" (decision 1/CMA.5, paragraph 24). This gap is a collective failure that requires collective leadership as a global response. Brazil calls for collective leadership through mutual-empowerment and cooperation, instead of competition. Systems thinking and abiding by complexity science also requires recognizing that the whole of our efforts will be more powerful than the sum of their parts.

Brazil's NDC target was based on projections from the BLUES integrated assessment model for a contribution that aligns the country's efforts with the objective of keeping the 1.50 C target within reach and on a path towards climate neutrality by 2050. In keeping with science and the principles and provisions of the UNFCCC and its Paris Agreement, Brazil expects Parties' NDCs to be integrated in a mutually supportive manner, with a view to reaching the 1.5 goal. In the longer-term, the 1.5 goal requires reaching net zero carbon dioxide emissions by 2050, globally. This implies developing countries to reach net-zero as close as possible to 2050, whilst developed countries should move faster - by 2045, for all greenhouse gases, as recommended by the International Energy Agency (IEA, Net Zero Emissions by 2050: A Roadmap for the Global Energy Sector, 2023), or 2040, as recommended by the United Nations Secretary General (Global Solidarity Pact, 2023), equally for all gases. In line with the 1.5 goal, Brazil already has a climate neutrality commitment by 2050, covering all gases. Brazil would welcome other countries to bring forward net zero greenhouse gas emissions commitments with a view to achieving global net zero by or around mid-century. Particularly, Brazil would welcome developed countries bringing their net zero commitments to either 2040 or 2045, while welcoming other developing countries to also come forward in their next NDCs with ambitious, economy-wide emission reduction targets, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5° C, as informed by the latest science, in the light of different national circumstances.

BRAZILIAN GOVERNMENT



UNITING AND REBUILDING