# An agenda for unblocking the bioeconomy









# An agenda for unblocking the bioeconomy

São Paulo, May 15, 2020

#### Your Excellency Mr. Vice-President of the Republic Hamilton Mourão,

We write to follow up on the meeting held on May 4, 2020, when we discussed actions and proposals for developing the bioeconomy in the Amazon; to formalize the suggestions offered; and to make ourselves available to collaborate with the Federal Government on the steps needed to advance biodiversity business in the Amazon region.

The bioeconomy encompasses value chains that are guided by advanced scientific knowledge and by the search for technological innovations in the application of biological and renewable resources to industrial processes so as to generate circular economic activity and social and environmental well-being.

The bioeconomy has great potential to leverage businesses by combining preservation and protection of the rainforest, as well as its biodiversity, and by spreading economic activities and sustainable development across all Amazon states.

This is due to the fact that the bioeconomy, starting with the use and conservation of biological and renewal resources—which include products, processes, and services—facilitates the utilization of biodiversity inputs by a wide variety of economic sectors.

With its vast territory and abundant biodiversity, the Amazon offers an infinite array of raw materials that, starting with bioinnovation, can be converted into thousands of molecules and compounds with high value-added. Because of this, initiatives to promote the bioeconomy should encompass actions that focus on forest products, such as açaí, Brazil nuts, cacao, vegetable oils (made from babaçú, andiroba, buriti, and other trees). They should also encourage the expansion of fish farming of Amazon species (including their products, such as meat, oils, leather, and residues), among others.

Unlocking this agenda, offering conditions for the increase of industrial and value chains— from the extraction of raw materials; primary processing; research, development and innovation; and industrialization; until the final consumer—requires a public-private strategy with central coordination, aligning initiatives by different government agencies and private sector actors, financial players, local communities, as well as actors from academe and civil society.



The actions listed below, divided into three key groups (financing and infrastructure, support for supply and production; market development and demand) are considered by the signatories to be the most important and urgent public policy measures that should be adopted, with the capacity to unlock the bioeconomy in the short-term. Such an agenda offers the possibility that the Amazon region, which is suffering immensely with COVID-19, will emerge from this crisis in a rapid, safe and sustainable manner, generating jobs, income, social inclusion, as well as environmental protection and preservation.

That is the value of the preserved forest. We thus offer a roadmap so that this value may be harnessed, shared, and bolstered for the good of Brazil and of Brazilians.

Under your leadership, as Chairman of the Amazon Council, we trust that, this time around, the issue of the bioeconomy in the Amazon region will move forward with an integrated vision for the future.

### FINANCING AND INFRASTRUCTURE

# • Financial Incentives and Contributions to Research, Development and Innovation (RD&I)

Upgrade Information Technology Law's R&D programme for the Manaus Free-Trade Zone (MFTZ), and broaden the scope of the R&D programme for MFTZ's remaining companies in the following terms, under the guided leadership and coordination of the Ministry of the Economy:

- Lower the annual gross revenue contributions by Information Technology companies that already provide mandatory funding to R&D programmes from 5% to 4%.
- Establish a 0.1% annual gross revenue contribution for all MFTZ companies, including Information Technology ones (which would therefore contribute 4.1%, as opposed to the current 5%).
- Allocate 50% of funds raised for the development of biodiversity--related research and business, such that:
  - 20% through direct application in innovation or or in Private Equity, Credit Receivables Investment Funds, Guarantee Funds, and other mechanisms for investing in innovation.
  - 30% through the establishment of an Amazon Biodiversity Fund, whose shareholders would be the compa-



nies from the MFTZ, so that the resources are allocated to bioeconomy companies, research institutes, and local businesses.

- The Biodiversity Fund governance, with the participation of companies from the sector, based on current models used in the international financial system (governance model with an innovative institutional framework and based on five pillars: public sector (more specifically, the Ministry of the Economy); private sector; academe; civil society; and investment banks).
- Ensure that funds are used exclusively to promote Amazon biodiversity research and business.

Map the distribution of raw materials and bioresources in the Amazon region, identifying each microregion's strengths and fostering the development of local industry, taking into account the raw materials available in each region.

Adaptation of special editions of current RD&I programmes (Funding Authority for Studies and Projects - FINEP; the Brazilian Development Bank - BNDES; the Brazilian Company of Research and Industrial Innovation - EMBRAPII; etc.) to focus on bioeconomy and Green Entrepreneurship, under the coordination of the Ministry of the Economy and the Ministry of Science, Technology, Innovation and Communications (MCTIC).

Create specific programs, led by MCTIC, to attract and keep researchers in the Amazon.

### • Infrastructure Suited for Bioeconomy

o Waterways, inland ports, and storage and distribution facilities for each segment of the bioeconomy chains (raw material collection, semi-processed ingredients, processed products), under the coordination of the Ministry of Infrastructure, in partnership with the Ministry of the Economy.

o Drafting of the Programme for Generation of Biogas Electricity, produced from forest biomass and animal and organic waste, specifically aimed at fostering fish farming activities in the Amazon, and run by the Ministry of Mines and Energy and the Ministry of Development, Industry and Foreign Trade (the Itaipu Binational Dam can be an important partner in this initiative).

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o Enhance digital connectivity in the Amazon (access to broadband Internet via geostationary and Medium Earth orbit satellites



or a constellation, in addition to undersea fiber optic cabling), led by MCTIC and the Ministry of Defense.

#### • Financial Engineering for the bioeconomy

Allocate, by 2022, 10% of the National Program for Strengthening Family Farming's (PRONAF) overall funding of the Amazon region for bioeconomy and sustainable extractive activities (in 2018, only 0.7% of its funding was directed to sustainable lines), under the coordination of the Ministry of the Economy and the Ministry of Agriculture.

Enable access to the National Program for Strengthening Family Farming (PRONAF B) by those involved in extractives, under the coordination of the Ministry of the Economy and the Ministry of Agriculture.

Better use of public funds that are already available, yet which are currently scattered, taking into consideration constitutional funds, the National Fund for Benefit-Sharing and other development and credit agencies (Bank of Brazil - BB; BNDES; the Amazon Bank - BASA; etc.), under the coordination of the Ministry of the Economy.

Work with the Central Bank and the Securities and Exchange Commission of Brazil (CVM) (partnering with BNDES and FINEP) in order to foster conditions for attracting investment capital to fund the bioeconomy through investment funds, private equities, accelerators, venture builders and venture capital, seed capital, and multilateral and developmental organizations.

Establish a carbon market under the leadership of the Ministry of the Economy, so that it becomes an important source of funding for the preservation of and an incentive for the bioeconomy.

## MEASURES AIMED AT DEVELOPING SUPPLY AND PRODUCTION

• Capacity-building and training in entrepreneurship, with a focus on local communities and producers.

Implement, through the S System, the "Sebrae Forest," with a local focus (local communities and producers), so as to foster an entrepreneurial culture in the Amazon region, under the supervision of the Ministry of the Economy.

Strengthen initiatives for capacity-building, training, and entrepreneurial enterprises that already exist in the Amazon, under the guidance of the Ministry of the Economy.



Encourage, through access to credit and to public policies, the formalization of producers, local communities, co-ops and associations, considering a joint coordination by the Ministry of the Economy and the Ministry of Agriculture.

Advance the introduction of new techniques and technologies of production (management, cultivation, harvesting, pre-processing), focusing on efforts by Embrapa alongside Technical Assistance and Rural Extension Companies - EMATERs; municipal agriculture and production offices; and federal and state universities, such as the Federal University of Pará - UFPA; the Federal University of Amazonas - UFAM; the Amazonas State University - UEA; etc.), under the coordination of the Ministry of Agriculture, Livestock and Food Supply (MAPA).

### Certification

Define criteria for quality standards and/or certification (the Brazilian System on Conformity Assessment - INMETRO - and the Ministry of the Economy already have these types of initiatives) and for crop health safety (the Brazilian Health Regulatory Agency - ANVISA - and MAPA).

Provide the Amazon region with laboratories and certifying agents. This process would take place through the MCTIC, with support from ANVISA and MAPA, and it could be carried out in partnership with Federal and State Universities, as well as the region's Teaching and Research Institutes and Foundations.

### • Legal security of producers

Apply the New Legal Framework on Biodiversity, ensuring that its goals of removing bottlenecks, fostering sustainable usage, and valuing biodiversity are met, which is a responsibility of the Ministry of the Environment.

Expedite the establishment of guidelines for investments destined for the National Fund for Benefit-Sharing (FNRB), prioritizing technological innovations applied to the sustainable use of biodiversity and support for local communities, indigenous peoples, and traditional populations, a responsibility of the Ministry of the Environment.

Carry out capacity-building for and advise small and medium-sized companies by means of the "Forest Sebrae" initiative, in order to apply the procedures of the Law of Access to Genetic Resources.



### MEASURES AIMED AT ENHANCING DEMAND

#### • Insertion into global value chains

Promote the industrial integration of forest products and ingredients (for example, the removal of existing bottlenecks in the rules governing the Manaus Free Trade Zone, so as to stimulate the entrance of bioeconomy companies and start-ups, under the coordination of the Ministry of the Economy.

Consolidate the production chains of the bioeconomy, focusing on the entrepreneurship and innovation ecosystem; fostering biomass and biorefinery power plants (BNDES and BASA); small and medium-sized companies; and technology-based companies, so that products and ingredients are used by food, cosmetic, chemical and pharmaceutical industries. This effort should include, for instance, the development of incubators and accelerators, the use of seed capital, and other support mechanisms for innovation and entrepreneurship (BNDES, FINEP, ABDI, MCTIC, and EMBRAPII), through a partnership between the Ministry of the Economy and the Ministry of Science and Technology.

Trade policy based on market access (implementation of the Mercosul-EU Trade Agreement and trade deals with Asian countries - negotiations involving the Ministry of the Economy and the Ministry of Foreign Affairs).

#### • Business Development

Support sales promotion and market development efforts (trade shows, road shows, missions—for example, harnessing APEX expertise for this purpose).

Create a "Sustainable Amazon" stamp for marketing purposes, certifying that the product has effectively contributed towards protecting and preserving biodiversity (including carbon emissions, value generation for local communities, and additional sustainability criteria). This stamp can be coordinated jointly by INMETRO, APEX, and MAPA.

Create and develop an Amazon bioeconomy organic production stamp, to be disseminated among producers, for access to international markets.

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The following are signatories to this document:

The Brazilian Bioinnovation Association (Associação Brasileira da Bioinovação - ABBI)

Amazon Entrepreneurship Center (Centro de Empreendedorismo da Amazônia)

CERTI Foundation's Center for the Green Economy Center (Centro de Economia Verde da Fundação CERTI)

Tatiana Schor - Executive Secretary of Science and Technology at Amazonas State Development Office

Instituto Escolhas

Institute of International Relations and Economic Cooperation (Instituto de Relações Internacionais e Comércio Exterior - IRICE)