



# PARÁ STATE PLAN FOR THE BIOECONOMY

**What it is**  
**Why it's important**

NOVEMBER 2022



## Pará State and the Bioeconomy: a Call to Action

In 2021, the State of Pará played host to the **World Bioeconomy Forum**, where it launched the **State Strategy for the Bioeconomy**, part of a broader policy to make the state carbon neutral for land use and forests within 15 years. Central to the State Strategy is the proposal to invest in and scale the bioeconomy, **a low carbon pathway to sustainable development.**

After an extensive consultation period, Pará State launched its Plan for the Bioeconomy in 2022, setting out investment plans across **three key pillars – research, development & innovation; Cultural and genetic heritage and traditional knowledge; and sustainable value chains and businesses** – which means that the state becomes a sub-national leader in the bioeconomy.

The Plan for the Bioeconomy will promote a greater **diversification of production in the bioeconomy sector, new legislation** and tools to support the transition, and actions that help to **integrate the supply chain** across the state, thereby scaling sustainable production and investment in nature-based solutions. Pará aims to become a major supplier to the bioeconomy both in Brazil and internationally.

As the world grapples with how to address climate change, Pará will transform from being the state with the highest carbon emissions in Brazil – due, largely, to land use changes and deforestation – to being at the vanguard of a new bioeconomy, where **forests and biodiversity are a source of income, social inclusion and climate change mitigation.**

Investment and scaling of the bioeconomy leads to reductions in deforestation, as the economic value of forests increases, and to forest restoration as a result of the expanded use of agroforestry systems. At a time when deforestation rates have risen, the Plan for the Bioeconomy paves the way for a **transition to a new economic model** that is more inclusive, fairer and will garner greater protection for the world's most important forest system.

The bioeconomy represents a major opportunity for sustainable development for Pará State: a recent study has projected that the **bioeconomy could be worth more than \$30 billion to the state** by 2040. In this context, it has been estimated that the preservation of the Amazon Forest would be worth some \$1.5 trillion.

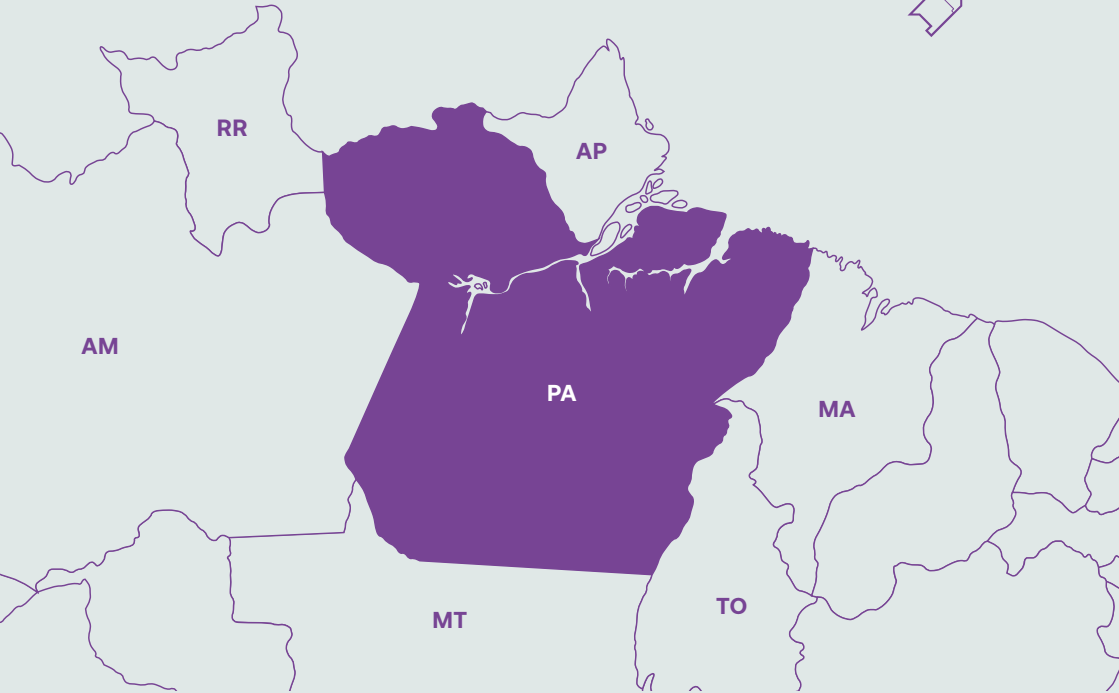
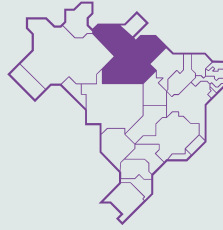
For local people to reap the economic benefits of a transformation to the bioeconomy, **investment is required in technology and innovation** at different stages of the supply chain, so that value is added locally. A more structured supply chain, that benefits from technical support, as well the organization of cooperatives and better governance will all help to generate income and jobs for local people.

In addition to the economic benefits, the biodiversity opportunities are immense: investment in the bioeconomy means not only discovering **new uses – cosmetic, food sector – for existing species, but also the discovery of new species.** The Amazon Forest is like an enormous library of knowledge and wisdom that has yet to be discovered: one study from last decade showed that every two days a new species of animal or plant is discovered in the Amazon.

Pará State's vision for the bioeconomy goes beyond sustainable production and climate resilience, and includes **green infrastructure, job creation and a low-carbon growth plan.** Investment in nature-based solutions will help to diversify the local economy, protect genetic heritage and value the local knowledge and culture of indigenous peoples.



# Key facts and figures

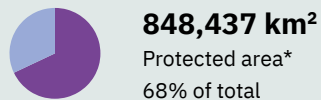


## TOTAL AREA

# 1,245,870 km<sup>2</sup>



equivalent area of France + Germany + UK



## POPULATION

# 8.8 m

4% of Brazilian population



## HUMAN DEVELOPMENT INDEX

# 0.697

ranked 24th of 27 Brazilian states



## AVERAGE MONTHLY INCOME

# US\$ 170

(21st of 27 states; national average is \$270)



## STATE GDP (2019)

# US\$ 36 bn

ranked 11th of 27 Brazilian states



## GDP GROWTH, 2010 - 2019

# 116%

(national average: 90%)

# The Bioeconomy in Pará

ANNUAL SALES

# US\$ 120 bn

of 43 exported products that are 'compatible with the forest'

TOP BIODIVERSITY PRODUCTS (US\$ MILLION)



## 920

Açaí



## 440

Manioc



## 340

Cocoa

DEVELOPMENT OF THE BIOECONOMY PLAN – KEY FIGURES

## 41

institutions  
involved

## 300+

people listened to in  
4 macro-regions

## 3

rounds of  
multi-sectoral  
workshops

## 14

bilateral  
meetings

## 89

actions in  
the Plan

## 3

pillars



SALE OF WOOD PRODUCTS

NATIONAL PRODUCTION

# US\$ 194 m

# 34%



## The Bioeconomy: what does it mean?

There are a multitude of definitions for the bioeconomy. The definition used by the State of Pará is as follows:

The Bioeconomy is an opportunity for socioeconomic development, that prioritizes low carbon production. Through reducing emissions, the bioeconomy promotes a viable pathway for the transition to an economy that is more diversified, fair and inclusive. It should create or improve processes for local production and for biodiversity, by embedding science, technology and innovation in the local economy. It guarantees genetic heritage, the valuing of traditional knowledge and the cultures of indigenous peoples, *quilombolas* and local communities and generates social, economic and environmental benefits for the whole population of Pará State.



# Pará State Plan for the Bioeconomy

## Consultation and Development of the Plan

Since 2019, the State government of Pará has been responsible for developing legislation aimed at ensuring the conservation of the state's natural resources alongside sustainable development.

The Bioeconomy Plan is a key component of the **Land Use, Land Use Change and Forestry (LULUCF) Plan**, under which the State established a plan to become carbon neutral in terms of forests and land use by 2036. The LULUCF Plan itself is part of the **Pará State Policy on Climate Change (PEMC)** that became law in April 2020 (see diagram).



## STATE PLAN AMAZON NOW

It establishes the specific guidelines, components in the territory to seek the new low-carbon paradigm and lasting results. The main strategic plan of the state with a long-term vision. It is a platform for actions for the sustained reduction of deforestation in Pará and aims to establish a development model based on the conservation and valorization of environmental assets on increasing the valorization of environmental assets, on increasing the efficiency of production chains and on improving socioenvironmental conditions in the countryside.

# PARÁ STATE POLICY ON CLIMATE CHANGE (PEMC)

Law 9048/2020 establishes the principles, general directives and valid instruments for reducing GHG emissions in Pará State

▼ **96%**

Sectoral Plan for Energy



Sectoral Plan for Waste



**Carbon Neutrality**  
by 2036



Sectoral Plan for Transport



Sectoral Plan for Industry



## SECTORAL PLAN FOR LAND USE, LAND USE CHANGE AND FORESTS (PEAA)

### LAND USE, LAND-USE CHANGE AND FORESTRY PLAN

### TARGETS

▼ REDUCE

**37%**

of Greenhouse Gas Emissions (GHG) by 2030



▼ REDUCE

**43%**

of Greenhouse Gas Emissions (GHG) by 2035



▼ REGENERATE

**5.6 mi**

million hectares by 2030



▼ REGENERATE  
**7.41 mi**  
million hectares  
by 2035



## AXES OF PEAA

Command and Control

Environmental and land regularization

Low-carbon social and economic development

Sustainable Territories

Redd+

# STATE bioeconomy PLAN

## CLIMATE FINANCING

\$ Eastern Amazon Fund (FAO)

\$ Bioeconomy Guarantee Fund

\$ Concessions for Conservation

\$ Ecosystem of Funds

THE PLAN:

# Key Points

## Three Pillars of the Pará State Plan for the Bioeconomy

6 Objectives



### Research, development & innovation

- ① Promote and apply scientific knowledge and technology research that promotes inclusive innovation with integrated social, economic and environmental benefits
- ② Identify and map knowledge about the bioeconomy across Para's diverse research institutes, incentivizing applied research and transforming it into new technologies, trainings and tools that will improve local production



### Cultural and genetic heritage and traditional knowledge

- ③ Protect and value traditional practices, integrating them into social development policies for low emissions, with social and environmental safeguards and guarantees of genetic heritage, linked to cultural knowledge and biodiversity
- ④ Guarantee the rights of local populations, and promote alternative pathways to sustainable development as well as courses and social and environmental integrity



### Sustainable value chains and businesses

- ⑤ Value Pará State biodiversity products in ways that add the region's unique qualities to local products, through certifications, the protection of intellectual property and designation of origin, among other strategies
- ⑥ Invest in the establishment of an environment that attracts investment to value chain and to new businesses based on sociobiodiversity, strengthening and integrating production, and promoting local development, jobs, income and a fair distribution of benefits.

The Pará State Plan for the Bioeconomy is the result of an extensive multi-sectoral development process, and is composed of **three pillars, six objectives and 89 actions**, as set out below. The actions seek to strengthen and grow priority value chains related to food, cosmetics and other sectors and include courses and **capacity building; credit lines** that promote investment in **new technologies and equipment; support to cooperatives and associations; economic instruments** that value environmental services embedded within products; and **investment in infrastructure for transport, power and internet.**





A **Working Group**, (known as GT-PlanBio), made up of representatives from the government, private sector, academia, NGOs and indigenous people, *quilombolas* and traditional communities, was established in May 2022, with responsibilities for designing and overseeing the listening process that led up to the creation of the Plan and providing technical input as it was developed. This process built on the first draft of the Plan that was prepared by the State Government.

As part of the **listening process**, the draft was then sent out for an extensive dialogue process that began in May 2022, and included: three multi-sectoral workshops; 14 bilateral meetings between the State Environment Secretary (SEMAS) and other state government institutions; and a series of ‘ethnic-regional’ workshops in four population poles: Altamira, Belém, Santarém and Marabá.

A **public electronic consultation** subsequently took place between September and October 2022 and resulted in a total of 421 downloads ranging from private to public sectors and from research institutes to indigenous peoples’ associations, *inter alia*.

The resulting Bioeconomy Plan contains a total of **89 actions** that were identified as priority by the State government, with detailed input from the Working Group, and adjustments made as a result of the listening process with a wide range of stakeholders.

# The Actions

Below are some of the highlights from the Plan:

**1.** Establishment of the Bioeconomy Observatory to gather and analyse research and data on different bioeconomy value chains

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**2.** Incubate bioeconomy start-ups working with bioproducts and bio-businesses

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**3.** Increase the offer of graduate courses focussed on the bioeconomy and sustainable development

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**4.** Establish the Bioeconomy Museum, and the Pará Bioeconomy and Innovation Park

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**5.** Courses and capacity building in genetic heritage and traditional knowledge for public and private sectors, academia and indigenous, *quilomobola* and traditional communities.

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**6.** Scientific research projects about genetic heritage and traditional knowledge, linked to biodiversity

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**7.** Draw up a state-wide policy on technical assistance and extension services that strengthen local value chains working with the bioeconomy

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**8.** Draw on federal laws for sociobiodiversity to improve state-level sanitation legislation for animal and vegetable sociobiodiversity products

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**9.** Build management capacity for cooperatives and associations among indigenous, *quilomobola* and traditional communities.

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**10.** Draw up a state policy for artisanal fishing, along with supporting credit lines

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**11.** Create a 'green seal' that guarantees the origin and traceability of fish that were caught in specially managed areas

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**12.** Design a line of micro-credit for bioeconomy entrepreneurs, with a focus on sanitation compliance

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**13.** Support the fair and transparent minimum pricing of sociobiodiversity products that includes the environmental services they provide

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**14.** Offer technical courses on bio-cosmetics

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**15.** Establish local production clusters and poles for cosmetics, fashion and design, cheese, tourism, flour, açai, cocoa, ceramics and other products identified in the Plan

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**16.** Establish a permanent dialogue space between the State government and indigenous, *quilomobola* and traditional communities.

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**17.** Communication and marketing campaign to strengthen the Amazônia brand and create markets in Brazil and internationally

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**18.** Launch the Reference Centre for Biodiversity and the Bioeconomy in the Amazon

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**19.** Payment for Environmental Services Platform created, with a particular focus on indigenous, *quilomobola* and traditional communities, and family farming.

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The development and delivery of these and other actions listed in the Plan for the Bioeconomy represent a **major opportunity for traditional and new enterprises** from Pará State and requires **innovation** at the state and enterprise levels, increased efficiency through **investment and social technology**, and **value adding through origination**, among other strategies.

# Financing and Investment

The Plan sets out three key financing instruments to be implemented:

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## Access to Credit and Structuring of Funds

– promote access to investment in sustainable value chains by stimulating the creation and demand for credit lines that recognize the particular qualities of the bioeconomy, such as agroforestry systems.

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## Policy on Minimum Pricing for Sociobiodiversity Products

– in light of the low pricing of sociobiodiversity products, compared with the prices paid for items with value add from other supply chains, this instrument will draw on the Brazilian Federal Government’s policy to Guarantee Minimum Prices for Sociobiodiversity Products (PGPM-Bio) that covers 17 products that help to preserve Brazilian biomes. qualities of the bioeconomy, such as agroforestry systems.

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## Payment for Environmental Services (PES)

– one of the principles of the Plan for the Bioeconomy is that environmental services will be recognized and valued through PES systems that add value to supply chains based on biodiversity, forest conservation and the valuing of environmental assets.





## A Call for Partnership

Imagine a **future for Pará State**, for the Amazon and for the World: a future where talk is no longer of the swathes of forest that have been lost, but of the **forests that have been restored**; a future below 1.5 degrees centigrade, where **indigenous and traditional knowledge and culture** is valued and protected; where there is **prosperity, equality and social justice**; and where **bioeconomy value chains are thriving**.

The actions set out in the Pará State Plan for the Bioeconomy represent a pathway towards that future: one of **low emissions, and sustainable livelihoods**. Pará State is at the vanguard of this transformation that recognizes the value of forests and the people who live in them. For this future to be reached **investment, political will and partnership are all required**.

But the future is not as far away as you may think. Pará State, the Secretary of the Environment and Sustainability (SEMAS) and our local partners invite you to **join this partnership**, as we strive to achieve **a future built on nature, people and a bioeconomy that is prosperous, fair and inclusive**.

AMAZÔNIA  
 AGORA★

