BIOECONOMY AND REGIONAL DEVELOPMENT

Bioeconomy Value Chains MCTI

Bruno Nunes
General Coordinator of Bioeconomy
CGBE / DECIV / SEPEF / MCTI

Brasília, October 8th, 2020
MISSION

MINISTRY OF SCIENCE, TECHNOLOGY AND INNOVATION

Produce knowledge

Produce wealth for Brazil

Contribute to the quality of Brazilian people
Science, Technology and Innovation National Strategy – 2016|2022

Strategic Issues
WHAT IS BIOECONOMY?

Set of economic activities based on the use of sustainable biological resources to replace fossil raw materials in the production of food, feed, materials, chemicals, fuels, and energy (...) for the promotion of health, development, and sustainable growth and well-being of society.
PACTI BIOECONOMY

Biomass
- Inputs
- Integrated production systems
- Waste uses
- Genetic improvement
- Sustainable use of biodiversity and new biomasses

Processing
- Biomass pretreatment and treatment technologies
- Bioremediation
- Technologies and inputs for bioindustries
- Pilot plants

Bioproducts
- Industrial biotechnology and synthetic biology
- Renewable chemistry
- Microorganisms and enzymes
- Biomaterials, biocomposites and their uses
- Biofuels (has dedicated plan)

Brazilian Bioeconomy Observatory (knowledge hub)
National Bioeconomy Committee (governance at federal level)

Institutional Themes
MCTI: BIOECONOMY MAIN ACTIONS

**NEXUS**
Water, Energy and Food Security

**SAN PLATFORM**
Knowledge in Food and Nutritional Security

**LIFE CYCLE ASSESSMENT**

**POLINATORS**

**BIOECONOMY PRODUCTIVE CHAINS**

**OPPORTUNITIES AND CHALLENGES OF BIOECONOMY**

**CIRCULAR ECONOMY**

**INDUSTRIAL BIOTECHNOLOGY AND BIOREFINERIES TECHNOLOGIES**

**BIOENERGY**

**NATURE BASED SOLUTIONS**

**RENEWABLE CHEMISTRY**
BIOECONOMY VALUE CHAINS

AMAZÔNIA
- Açaí
- Castanhas
- Cupuaçu
- Pirarucu

CAATINGA
- Licuri
- Palma forrageira
- Sisal/Ágave

CERRADO
- Baru
- Macaúba
- Ora-pro-nóbis

CERRADO
- Sisal/Ágave

PANTANAL
- Capivara
- Jacaré
- Peixes

MATA ATLÂNTICA
- Açaí juçara
- Banana
- Cacau

BIODIVERSIDADE MARINHA
- Micro e macroalgas
- Camarão

OBJECTIVES

Adding and retaining value in communities

Regularization, certification, and access to markets

Development of new products

Utilization of waste and by-products - Circular Bioeconomy

Sustainability
CADEIAS PRODUTIVAS DA BIOECONOMIA MCTI

AÇAÍ / CUPUAÇU
Small-scale food factories (containers),
Production of dehydrated and powdered foods;
Renewable energies (photovoltaic, solar and biomass);
Good Production Practices.
R$ 2.000.000,00

PIRARUCU
Floating processing unit;
State Inspection Service - SIE;
Social technologies, renewable energy and local materials;
Good Production Practices.
R$ 1.800.000,00

LICURI
Development of bioproducts;
Commercial standardization of oil;
Identification of active ingredients
(Molecular Power House - CNPEM);
Good Production Practices.
R$ 1.800.000,00
OBJECTIVE

Develop a strategy to implement the PACTI Bioeconomy and support the formulation of national policies for the definition of programs and projects that are structural, mobilizing and mission-oriented in order to take advantage of the opportunities and overcome the challenges presented by the bioeconomy.

MAIN ACTIONS

Mapping competencies and capacities in RD&I

Conceptual Field of the Brazilian Bioeconomy

Modeling Brazilian Bioeconomy Knowledge Hub

Governance at federal level

Mission-Oriented Programs (opportunities and challenges to structuring, mobilizing, and driver the development of bioeconomy)

Bioeconomy National Conference

SUBSIDIATE THE BRAZILIAN BIOECONOMY POLICY