Outlook for Biofuels in Brazil

The time for Biofuels is now!

GAIA SILVA GAEDE
ADVOGADOS

35 ANOS

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Biofuels Around the World

The International Energy Agency (IEA) highlights the need to **triple investments in clean energy** by 2030 to achieve **carbon neutrality by 2050**.

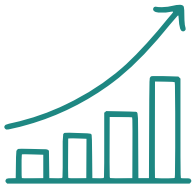
Aproximadamente 55% dos investimentos devem ocorrer em países emergentes e em desenvolvimento, como o Brasil.

Approximately 55% of investments should take place **in emerging and developing countries, such as Brazil.**

Biofuels emerge as a key solution for hard-to-abate sectors.

Brazilian Potential

2nd largest producer of liquid biofuels in the world



169% increase in production over the last 10 years

Leader in ethanol, biodiesel, and biomethane

Panorama of Brazil's Main Biofuels

	RAW MATERIALS	PRODUCTION (2024)	POTENTIAL BY 2034	POSSIBLE USES
ETHANOL	Sugarcane, Corn	36 billion liters	48,5 billion liters	Flex Vehicles, SAF, Export
BIODIESEL	Soybean Oil, Beef Tallow, Cottonseed Oil	10,3 billion liters	13,6 billion liters	Road, Maritime, and Rail Transport
BIOMETHANE	Agricultural, Agro-industrial, and Urban Waste	2,9 billion Nm^3	6,4 billion Nm^3	Replacement of Fossil Natural Gas, Mobility, and Industry

Source: PDE 2034

NEWS: The Brazilian Tax Reform!

The Tax Reform (Complementary Law No. 214/2025) ensured that biofuels are subject to a **lower taxation rate** compared to fossil fuels.

Timeline

Law No. 11.097/05

National Biodiesel Production and Use Program (PNPB, in Portuguese)
Launches the initial framework for the inclusion of biodiesel in the national energy matrix and amends Law No. 9.478/97 (Petroleum Law).

Law No. 12.490/11

Biofuels Law
Consolidates incentives for sustainable production and use of biofuels in Brazil and amends the Petroleum Law and Law No. 9.847/99 (Penalties Law) to include biofuels within the scope of the National Petroleum Agency (ANP).

Law No. 13.033/14

Biodiesel Addition to Diesel
Makes it mandatory to mix biodiesel with diesel fuel sold to the final consumer.

Law No. 13.576/17

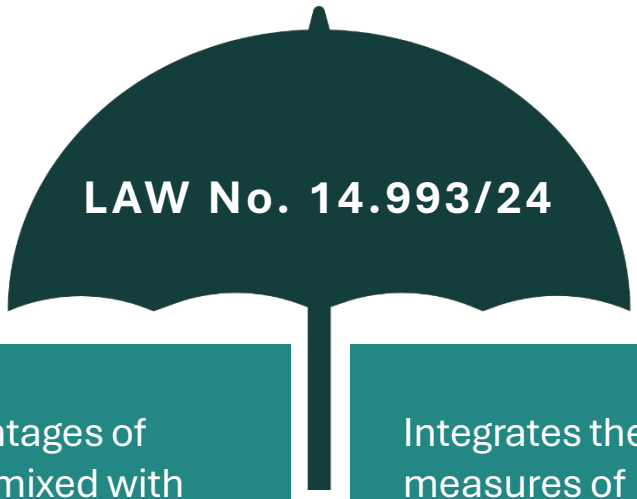
RenovaBio Program
Establishes the National Biofuels Policy to support climate commitments, improve energy efficiency, and expand the presence of biofuels in Brazil's energy matrix.

Law No. 14.993/24

Future Fuels Law
Regulates and encourages the production and use of sustainable fuels, establishing guidelines for synthetic fuels, CO_2 storage, and new sectoral programs, among other topics.

The Future Fuels Law

Important Advances in the Brazil's Decarbonization Agenda!



Changes the percentages of anhydrous ethanol mixed with gasoline C and biodiesel mixed with diesel

Integrates the initiatives and measures of RenovaBio, the Mover Program, PBEV, and Proconve

Creates the National Sustainable Aviation Fuel Program (ProBioQAV) and the National Green Diesel Program (PNDV)

Creates the Biomethane Origin Guarantee Certificate (CGOB)

Creates the National Decarbonization Program for Natural Gas Producers and Importers and Incentive Program for Biomethane

Regulates the capture and geological storage of carbon dioxide (CCS) and the production and trade of synthetic fuels

According to estimates from the Brazilian government, the projected investments amount to **R$ 260 billion** to prevent the emission of 705 million tons of CO_2 by 2037.

Trends

SUSTAINABLE AVIATION FUELS (SAFs)

Aviation is one of the **most challenging sectors** for decarbonization. With the growing demand for jet fuel, Sustainable Aviation Fuels (SAFs) emerge as the primary alternative to reduce emissions. Policies like **RenovaBio** and **ProBioQAV** reinforce Brazil's commitment to the energy transition in the aviation sector.

It is estimated that **Brazil's demand** for SAFs by 2034 will reach **6.5 billion liters** (PDE 2034).

CORSIA

This program by the International Civil Aviation Organization (ICAO) aims to reduce and offset CO_2 emissions in international aviation, requiring emissions above the 2019-2020 average to be compensated with carbon credits or the use of eligible fuels, such as SAFs.

Trends

BIOMETHANE

Derived from the purification of biogas generated by the decomposition of agricultural, agro-industrial, and urban waste, biomethane is a **sustainable alternative to fossil natural gas**, with applications in mobility and industry.

RenovaBio Program

Allows biomethane to generate Decarbonization Credits (CBIOs), which are traded on the Brazilian Stock Exchange (B3) and purchased by distributors to meet emission reduction targets. With high efficiency (77 gCO_2eq/MJ), every 339 m^3 sold corresponds to one CBIO.

REIDI

Holders of biomethane projects can qualify for the Infrastructure Development Incentive Regime (REIDI, in portuguese), reducing costs through the suspension of the PIS-Pasep and Cofins taxes on goods and services.

BIOGENIC CARBON CAPTURE AND STORAGE (BIOCCS)

This new technology captures carbon emitted during the biofuel production process, enabling "negative emissions”.

The captured CO_2 can be stored in geological reservoirs or used in the production of electrofuels, combining biogenic CO_2 and renewable hydrogen.

OUR CORPORATE SUSTAINABILITY TEAM IS READY TO ASSIST YOU!

We support our clients in integrating corporate sustainability practices into their strategy, based on their level of ambition and the qualified management of sector-specific risks and opportunities.

We are a law firm that integrates the Environment, Climate Change, ESG, and Energy Transition departments.

Follow our team!

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