

## RenovaBio-Towards a New National Biofuel Policy and a Truly Sustainable World

Miguel Novato\* and Miguel Ivan Lacerda

Ministry of Mines and Energy, Brazil

\*Corresponding author: Miguel Novato, Director of Biofuels, Ministry of Energy, Brazil, Tel: +55 61 2032 5509; Fax: +55 61 2032 5626; E-mail: miguel.oliveira@mme.gov.br

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### Opinion Article

For some decades, Brazil has opted for a strategy of producing fuels from biomass, the so-called biofuels. With creativity and a good dose of innovation, the country was able to turn crises caused by oil shocks into big opportunities for investing in sugarcane ethanol as a stable and safe source of energy for its vehicles fleet. The second step was the commitment to biofuels through the implementation of the National Program for the Production and Use of Biodiesel (PNPB). The Biodiesel Program, coupled with the considerable expansion of the fleet of flex-fuel vehicles, consolidated Brazil as a reference in biofuels. Over the past few years, Brazil has been able to use biofuels in times of economic crises and booms to overcome difficulties and improve its vehicular energy matrix. That's because the country has a unique combination of factors such as arable land available for expansion of biofuel production (no cost of opportunity in relation to food production and no need for new areas resulting from deforestation), one of the highest productivity on the planet, research centers with tradition in the production and development of biofuels and an established consumer market with great potential for growth.

However, we are still facing issues that are crucial for the future of this sector: What is the role of biofuels in the debate on the climate change scenario that we are facing at the global level today? Which contributions can biofuels offer in efforts to mitigate the emission of greenhouse gases, the recovery of the economy, the generation of new jobs and the socioeconomic development of the country?

Twenty-five years ago, in Rio-92, we were already hosting the discussion of a socio-economic development agenda on a sustainable basis. Even before this milestone, the country was already playing a leading role in the production and consumption of biofuels. Undoubtedly, there is a clear global movement to reduce the use of fossil fuels. Not only because of greenhouse gases, which are proven to be harmful to the environment, but also due to other pollutants such as particulate matter, which are responsible for hundreds of thousands of annual deaths worldwide.

More recently, following the signing of the Paris Agreement during COP21 and its subsequent ratification by Brazil, in an unprecedented commitment involving almost every country in the world (and despite the recent defection of the United States), clear goals were established for the reduction of greenhouse gas emissions in the national territory: 37% less emissions in 2025 than in 2005. By 2030, the reduction target is set at 43%, also based on 2005.

Nowadays, biomass is the second largest source in our energy mix, accounting for 28% our energy consumption. Even with such outstanding participation, it emits only 3% of total greenhouse gases of the mix! We, therefore, are in the perfect position to present innovative

solutions in the generation of clean energy in the country and the chance to offer to the world a technology in which Brazil is one of the ultimate exponents. However, in order to make it effective, it is necessary to implement public policies that stimulates the production of more efficient biofuels, with higher energetic content and with lower pollutant emissions. This policy already exists and has a name: "RenovaBio".

RenovaBio is a modern agenda. It is a program built in a collaborative way by public servants, researchers, representatives of the market and civil society, political leaders. People, who are in their respective areas of activity, are committed to a truly sustainable future. RenovaBio has been developed from the refinement of major international experiences in emission reduction policies, such as the Renewable Energy Directive of the European Union (RED), the Renewable Fuel Standard Program (RFS), the US Federal Government and the Low Carbon Fuel Standard (LCFS), of the State of California. As central element, these policies adopt the evaluation of life cycle, used to measure the contribution of the biofuels in the process of reduction of emissions of greenhouse effect gases.

RenovaBio aims to ensure predictability for the expansion of production and the use of biofuels. The lack of stable rules for all economic agents and the lack of definition about the role of biofuels in the energy matrix were the main reasons why the expansion of biofuel production has not occurred in recent years. For this reason, the Ministry of Mines and Energy launched this proposal in the end of 2016. Throughout 2017 it has been greatly improved by many hands, and the result is a proposal of a new fuel policy that places Brazil in a leading position among worldwide measures for reducing greenhouse gas emissions.

The establishment of a new legal framework for fuels market is at the heart of the RenovaBio proposal. In this legislation, we sought to establish a mechanism for classifying biofuels according to their respective levels of energy-environmental efficiency, through the individual certification of producers. More efficient producers will have, as a reward, the possibility of issuing financial assets, tradable on the stock exchange market in proportional quantities to the energy-environmental efficiency score of the biofuel produced by them. Fuel distributors will have obligations to purchase these assets, which may also be traded by individual investors. The objective of such mechanism is to promote the gradual reduction of carbon intensity of the Brazilian energy matrix in the short, medium and long term. In addition, the implementation of such policy will bring predictability to the biofuels market, in coexistence with fossil fuels, providing the right stimulus to constant innovation and pursuit of energy efficiency in a continuous path. In other hand, taking economic efficiency in consideration, these stimuli delivered by the RenovaBio policy make it are way better than the alternative advocated by some to promote tax

differentiation to foster biofuels through federal taxes such as CIDE or PIS/COFINS (CIDE and PIS/COFINS are the two Federal Taxes applied to fuels in Brazil. CIDE is an acronym for Contribution of Intervention in the Economic Domain. PIS/COFINS mean Profit Participation Program Contribution (PIS) and the Social Security Financing Contribution (COFINS)).

In short, RenovaBio opens the doors for the participation of all economic agents that, regardless of their size, are efficient and able to

sustainably supply biofuels for our country, what will generate domestic employment, income and socioeconomic development. Living in a truly sustainable world is possible, and biofuels can give us a good share of contribution to this goal, which is everyone's. Brazil may be offering the world an important part of the solution for carbon intensity reduction that it has been searching for a long time. So let us do the right thing, because our children and grandchildren depend on the decisions we are making today.