

**Comments by the Brazilian Government regarding TRIS notification for “Draft Law amending the Law of 17 July 2013 concerning the minimum nominal volumes of sustainable biofuels that must be contained in the volumes of fossil fuels released annually for consumption”. Notification number 2022/595/B (Belgium)**

***The importance of biofuels in the decarbonization of transport***

In the context of energy transitions and increasing efforts to combat climate change, the transport sector deserves special attention, as it accounts for about one third of all greenhouse gas emissions from final energy consumption. The share of renewable energies in this sector, in fact, is still very low, both in global terms and in the European Union.

In this sense, it is important to encourage the development of complementary solutions and technologies that promote emissions mitigation objectives in the short, medium and long term. In the short term, sustainable conventional biofuels are one of the few options available to promote a significant change in the emission pattern of the existing vehicle fleet. They have the advantage of using the same infrastructure that already exists for fossil fuels.

It is also worth highlighting the complementarity between conventional fuels and advanced fuels in terms of production infrastructure. The imposition of arbitrary restrictions on conventional biofuels, therefore, may harm and create disincentives for the nascent advanced biofuels industry, which depends on advances in areas where cost barriers and technological and operational challenges remain. Those hurdles can be overcome with the aid of the capabilities and expertise accumulated in the production of conventional biofuels. An example of these interrelationships is the cellulosic ethanol industry, which is based on the first generation ethanol industry. The cellulosic ethanol industry does not compete against the first generation ethanol industry but, on the contrary, it is fully integrated to the latter.

***Environmental performance of first generation biofuels***

The claim that biofuels produced from food crops for human or animal consumption (food and feed crops) have, by definition, a worse emission profile than fossil fuels is arbitrary and has no technical support. Different raw materials for biofuels can present highly variable environmental performance,

depending on production practices and the production profile adopted – characteristics that are fundamentally associated with the context.

It is common knowledge that the most consistent way to gauge the environmental performance of biofuels produced from different raw materials is through the assessment of emissions throughout the life cycle. There is extensive scientific literature on the subject, attesting the environmental performance and sustainability of first-generation biofuels produced based on modern and efficient agricultural practices. The EU Directive 2018/2011 (“RED II”) recognizes that the average environmental performance (default) of sugarcane ethanol and soybean biodiesel is, respectively , 70% and 50% in terms of emission reductions compared to fossil fuels.

As for the alleged impacts on land-use, resulting from the suppression of native vegetation, such assumptions must necessarily be confronted with empirical evidence about the pattern of expansion of production of raw materials in specific countries and regions. It is also necessary to take into account the territorial planning policies that regulate and restrict this expansion. Possible negative impacts on biodiversity are also dependent on assumptions about the suppression of native vegetation, which, therefore, also depend on a technical assessment of production conditions. There is therefore no scientific justification for excluding an entire category of raw materials on the basis of alleged negative impacts on the environment.

With regard to impacts on food safety, the most recent literature on the subject also does not allow arbitrary assumptions to be made based exclusively on the category of raw material used. Claims of potentially negative impacts are, as a rule, based on generalizations from theoretical models, now criticized by the most up-to-date scientific literature precisely for being ineffective in evaluating empirical evidence from local and regional circumstances . This evidence demonstrates, on the contrary, that the main factor affecting food prices is the fluctuation of oil prices, and no influence related to biofuel prices has been identified. Furthermore, several recent studies indicate that a broad set of measures, which include productivity gains resulting from technological innovation and improvements in the management of raw materials, polyculture practices (i.e. the inclusion of successive crops throughout the year in the same area) , pasture intensification and livestock efficiency gains, are capable of promoting - and, in fact, already promote - synergies between agricultural production for bioenergy and food security.

In this sense, arbitrary limitations on certain categories of raw materials do not enjoy scientific support, diverting the focus from what really matters when it comes to promoting environmental and

climate benefits through the expansion of the use of biofuels: technical assessment of environmental performance and the encouragement of good production practices.

### ***First generation biofuels in Brazil***

The scenario of production of raw materials for bioenergy in Brazil is a telling example of how the combination of modern agricultural practices with comprehensive and innovative legal frameworks and territorial planning policies are able to ensure that the production of biofuels effectively contributes to the fight against climate change in a sustainable way.

Brazil has a very strict environmental legislation, which imposes restrictions on land-use change, unparalleled in other countries. The Forest Code (Law No. 12,651/2012) establishes legal reserve areas in rural properties that cannot be used for farming or other purposes, in addition to permanent protection areas. In the Amazon biome, for example, 80% of rural properties must be protected as a legal reserve.

Furthermore, it is worth noting the important role played by the National Biofuels Policy (RenovaBio) of inducing sustainable practices. RenovaBio (Law 13,576/2017) establishes strict criteria to ensure the sustainability and environmental performance of biofuels produced in Brazil. The prohibition of the use of raw materials from areas where native vegetation has been suppressed (Resolution ANP No. 758/2018) is an eligibility requirement. RenovaBio also requires the certification of producers by inspection firms through a technical assessment of the environmental performance of production, based on a methodology for evaluating emissions throughout the life cycle. Thus, the program contributes decisively to ensuring the sustainability of the raw materials for biofuel production in Brazil.

Furthermore, in the case of soybean, in addition to existing legal obligations, private sector traders, in order to demonstrate their commitment to the preservation of the Amazon biome, have established even more restrictive standards, through the Soy Moratorium, launched in 2006 and sponsored by ABIOVE (Brazilian Association of Vegetable Oil Industries) and by ANEC (National Association of Cereal Exporters). Together, the two associations are responsible for the sale of more than 90% of the soybean produced in Brazil. The initiative established a commitment not to buy or finance soybean crops in areas of the Amazon biome that were deforested after 2008.

In this sense, the empirical evidence about the expansion profile of sugarcane and soybean production in Brazil – the two main raw materials for biofuels used in the country – attest to the existence of high environmental performance and reduced risk of land-use change.

In the case of sugarcane, according to data from MapBiomass, an open multi-institutional platform supported by universities and NGOs, between 2008 and 2017, the expansion of production on new lands occurred on agricultural and pasture areas, with only 1% of expansion occurring over other (non-forest) land types.

Deforestation is virtually absent from sugarcane expansion. Furthermore, the production areas are located, mainly, in the Center-South of the Brazilian territory, more than 2 thousand km away from the Amazon biome, in areas that, on the contrary, present the best rates of recovery of native vegetation since 2008.

It should also be noted that the soybean contains only 17% to 20% oil. In this sense, soybean should not be considered as a typical energy crop, since the expansion of production is determined and driven by the protein market, and not by the demand for oil for renewable energy production. For this reason, it would be incorrect to attribute any indirect land-use changes to the use of soybean oil for biofuel production.

Finally, the aforementioned second-crop corn production has allowed, in recent years, the beginning of corn ethanol production in the Brazilian Midwest (Mato Grosso). It is a highly dynamic industry, which is an excellent example of the synergies obtained by the integration of bioenergy systems with broader agroforestry systems. In this case, the production of corn exclusively in the second crop, integrated with the planting of soybeans, contributes to mitigating pressures on land-use. At the same time, the production of fuel and electricity from locally grown eucalyptus biomass reduces overall emissions of the production process. In fact, it even promotes environmental gains resulting from removals (negative emissions), thus providing robust environmental benefits in terms of reduced emissions and production sustainability.

***Sustainability of Brazilian soy and inconsistency of the Belgian government's draft law with regard to the technical parameters of the European Union regulations***

The European Union Directive on Renewable Energy (RED II) - Directive (EU) 2018/2001, of December 11, 2018 - sets a specific target of a minimum of 14% renewable energy in the transport sector. In relation to biofuels, a maximum limit of 7% was maintained for the use of conventional biofuels - originally introduced in 2015 in European regulations, as a result of discussions on indirect land-use change (ILUC).

In order to address concerns related to emissions by ILUC and within the framework of article 26 of RED II, the European Commission adopted a delegated act - Delegated Regulation (EU) 2019/807, of March 13, 2019 - which establishes criteria for determining of raw materials with high risk of ILUC, as well as criteria for certification of biofuels, bioliquids and biomass fuels with low risk of ILUC.

The preparation of said delegated regulation, including the classification of raw materials in terms of the risk of ILUC, resulted from studies and discussions of an eminently technical nature, including stages of public consultation and seminars between experts and interested parties. These consultation rounds were attended by Brazilian experts, who were able to share data and scientific evidence about the environmental performance and the dynamics of soybean production and crop expansion in Brazil, highlighting the following elements:

- The expansion of soybean production over areas of native vegetation (deforestation footprint) in Brazil is insignificant and has been decreasing in a consistent and continuous pattern over the last decade, representing less than 8% of the total expansion between 2012 and 2017. In the case of the Amazon biome, the percentage is even lower - around 3%.

- The change in the pattern of soybean expansion in Brazil in recent years is related to several factors, notably the predominance of soybean cultivation expansion over underused pasture areas - which is associated with the livestock intensification process itself - as well as the expansion over former areas of corn in the first crop, replaced by systems that combine, in the same area, soybeans in the first crop and corn in the second.

- The role of the legal frameworks currently in force, such as the Forest Code (Law No. 12,651/2012) - which establishes areas of permanent protection and legal reserve in rural properties. Since 2006, the average rate of deforestation in the Amazon biome in areas occupied by soy has been reduced by 4.6 times - even though the area cultivated with soy in this region has quadrupled between 2005/06 and 2018/19. It is also important to highlight, in this context, the role of the aforementioned RenovaBio program.

Despite the consistent positive evolution of the pattern of soy expansion over the Brazilian territory, the dissemination of decontextualized and wrong information on the subject continues to occur, which is mainly due to the use of outdated databases, largely referring to the pattern of soy expansion in the 1990s and early 2000s.

As a result of the technical contributions presented during the process of drafting the delegated regulation, soybean was not included in the list of raw materials with a high risk of ILUC (which includes only palm oil, as provided in the Annex to the aforementioned regulation), being expressly recognized as a fully eligible raw material under RED II for the purpose of promoting renewable energy sources in the European Union. As an example, Annex V to RED II establishes that the average environmental performance (default) of soy biodiesel in terms of reducing greenhouse gas emissions throughout the life cycle is approximately 50% when compared to fossil diesel.

Thus, the bill notified to the EU is inconsistent with the parameters established by the RED II itself, ignoring the rationale and scientific evidence that guided the elaboration of the delegated regulation and resulted in the recognition of soy sustainability.

It is worth recalling that Delegated Regulation 2019/807 is being revised within the scope of a broader reform of the RED II. However, the revision will still undergo further steps before it is concluded. Therefore, the bill submitted by the Belgian government would be anticipating the outcome of these negotiations, and opting for an even more discriminatory and arbitrary path by singling out soy, as well as palm oil, in its Article 4, paragraph 2.