Brazilian Policy on Climate Change

March 2021



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Brazilian Policy on Climate Change

GHG Emissions by sector in Brazil Waste Industrial Treatmen processes 5% 7% Agriculture Energy 32% Land use, landuse change and forestry (LULUCF) 22% Source: SIRENE - Last reference year: 2016

- Considering the Fourth Communication from Brazil to the UNFCCC, Agriculture and land use, land-use change and forestry correspond to 56% of the total GHG Emissions in Brazil
- Brazilian NDC is economy wide and it's mainly focused on fighting against Amazon deforestation
- Other measures mentioned at the Brazilian NDC are:
 - Strengthen the low carbon emission agriculture program
 - Increasing biofuels and renewables in Brazilian energy mix
 - Improvement in infrastructure for transport and public transportation
 - Energy efficiency
- There is no specific goal for the reduction of industrial sector emissions under the Brazilian NDC

Paris Agreement and Brazilian NDC

Revised Brazil's First Nationally Determined Contribution

- Brazil reaffirms its commitment to economy-wide absolute greenhouse gas emission reductions of 37% in 2025 and of 43% in 2030, always with reference to 2005
- The targets will be translated into policies and measures to be detailed and implemented by the Brazilian Federal Government.

Controversial points

- 2005 Revised Baseline New National Communication from Brazil to the UNFCCC – methodological improvements applicable to the inventories
 - In absolute numbers: In the revised NDC, Brazil is now able to emit more in 2025 than it was foreseen to 2030 at the first NDC

NOTA À IMPRENSA Nº 162/2020

Esclarecimentos sobre a nova NDC brasileira submetida sob o Acordo de Paris

Publicado em 15/12/2020 13h33 Atualizado em 06/01/2021 18h48

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D iante de informações distorcidas que vêm sendo veiculadas por grupos de interesse e reproduzidas em diferentes veiculos de comunicação, prestam-se, a seguir, esclarecimentos sobre a Contribuição Nacionalmente Determinada apresentada pelo Governo brasileiro em 9 de dezembro corrente.

Com relação aos valores de referência, é incorreta a interpretação de que as metas constantes da Contribuição Nacionalmente Determinada do Brasil (NDC) ao Acordo de Paris têm como referência fixa as emissões de gases de efeito estufa de 2005 tal como constam da Terceira Comunicação Nacional do Brasil à Convenção-Quadro das Nações Unidas sobre Mudança do Clima, de 2016. A 3ª CN foi mencionada na NDC apenas por conter o inventário brasileiro de emissões vigente neste momento. O item 1 (f) do anexo da NDC esclarece, contudo, que "lals informações sobre as emissões em 2005 e valores de referência poderão ser atualizadas e recalculadas em função de aperfeiçoamentos das metodologias aplicáveis aos inventários". Na mesma linha, o item 5 (a) afirma que o Brasil "atualizará seus inventários nacionais para a série histórica com base nas Diretrizes de 2006 do IPCC, ou o que vier a eventualmente substituí-las". Ao

Brazilian NDC and carbon neutrality

Federal Government currently considers achieving carbon neutrality in 2060, but the Brazilian NDC affirms that the proper functioning of the market mechanisms under the Paris Agreement might justify considering a more ambitious long-term objective, for instance, the year 2050.

Brazil considers it essential that the negotiations on Article 6 of the Paris Agreement be concluded promptly and that the sustainable development mechanism (SDM) be operationalized as soon as possible.

Through the Floresta+ Program, the Government has set up an innovative policy for the payment of environmental services.



Photographer: Leonardo Carrato/Bloomberg

Politics

Brazil Puts a \$10 Billion-a-Year Price Tag on Carbon Neutrality

The country, home to a large portion of the Amazon rainforest, has said it will accelerate its climate commitments if it can get enough support.

By <u>Simone Preissler Iglesias</u> and <u>Laura Millan Lombrana</u> 9 de dezembro de 2020 16:45 BRT Updated on 9 de dezembro de 2020 19:24 BRT

Brazil will set a new goal to zero out carbon dioxide emissions by 2060-or sooner, if it can raise \$10 billion a year from other countries.

In this context, Brazilian NDC affirms that, as of 2021, Brazil will require at least US\$ 10 billion per year to address the numerous challenges it faces, including the conservation of native vegetation in its various biomes.

Carbon ETS versus Carbon Tax

ECONOMIA

Reforma tributária: governo estuda criação de 'imposto verde'

Em outros países, imposto é usado para taxar atividades poluentes que contribuem para o aquecimento global. Se tributo for criado, outros seriam reduzidos para compensar.

Por Alexandro Martello, G1 — Brasilia 15/08/2020 05h01 · Atualizado há 3 meses

> O governo federal avalia prop âmbito da reforma tributária de um imposto "verde" — sot emissão de carbono —, inforr Vanessa Canado, assessora e Ministério da Economia.

Os chamados impostos "vero



AMAZONAS 🚳

Queimadas no Amazonas em 2020

registram maior número da

Queimadas em Apul, no Sul do Amazonas. — Foto: Orlando júnior/Divulgação

- Carbon ETS, carbon taxes and carbon neutrality are under discussion in different levels of the Government
- National Congress has been working on priority projects of a green agenda
- Ministry of Economy has concluded the PMR Brazil study along with World Bank to evaluate the feasibility of the implementation of carbon pricing instruments in Brazil. The study concluded that ETS would be the most indicated instrument for the country, considering the transition process to a Low Carbon Economy.



CNI

A PRECIFICAÇÃO DE CARBONO E OS IMPACTOS NA COMPETITIVIDADE DA CADEIA DE VALOR DA INDÚSTRIA RESUMO EXECUTIVO

> Brasilia 2020

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Carbon ETS versus Carbon Tax

- Brazilian studies point to the fact that, if implemented, carbon taxation mechanisms could:
 - Increase the price of basic inputs to industry by more than 20% by 2030
 - Cause a negative variation of 1 to 3 % in the activity levels of several sectors, including chemical
 - Cause and negative variation in Brazilian GDP of up to 6% until 2050.
- Emissions trading systems have the unequivocal benefit of a gradual implementation process, protect the competitiveness of regulated agents and do not increase the tax burden on companies in an already complex and exorbitant tax system.
- ETS stimulate the business environment through productive investments based on innovation and on the adoption of increasingly efficient technologies, with lower emissions or that capture carbon.
- Brazilian Industry National Confederation (CNI) discusses the topic with entities of steel, cement, chemicals, paper, aluminium, and glass industries to have subsidies to an industry positioning.

ABIQUIM Position Paper

Chemical industry is a solution provider for Sustainable Development and the GHG emissions reduction, so Abiquim evaluates initiatives in climate change under an opportunity perspective, considering the competitive edge of the sector.

Position paper in favor of carbon ETS instead of carbon taxes - Brazilian tax burden is already substantially high

Advocacy and dialog with different stakeholders - national and internationally







MINISTÉRIO DA CIÊNCIA, TECNOLOGIA, INOVAÇÕES E COMUNICAÇÕES

BRASIL

Abiquim ETS and Carbon Pricing study

Main objectives

- Having enough information for the sector to be recognized as a solution provider for a low carbon economy and to position the sector on emerging global agendas such as carbon border adjustment mechanisms and carbon neutrality.
- Having robust technical information for the advocacy strategy on the adoption of carbon pricing mechanisms in Brazil that are suitable for the sustainable development of the sector, which do not represent a financial impact or a loss of competitiveness.

Guiding questions:

- What should be the basis for an ETS that could contribute to the competitiveness and the sustainable growth of the Brazilian Chemical Industry?
- How to guide investments by the Brazilian Chemical Industry in the coming years considering this agenda and its possible impacts and opportunities?
- > What are the boundary conditions necessary to invest in a sustainable way?



Scope of the study

- Comparative analysis of carbon tax and ETS instruments implemented around the world and a comparison with parameters from Brazil and the national chemical industry
- Executive summary of previous studies and a critical analysis of studies in progress by the Brazilian government
- Modeling of different scenarios of a domestic carbon market mechanism, to assess impacts and/or opportunities for the sector in the short (2024), medium (2030) and long term (2050). Evaluation for the chemical sector in general, chemistry sub-sectors and scenarios with different emission allowance allocation models, evaluation of the possibility of carbon leakage, and contributions to reduce emissions along the value chain.
 - Evaluation of the Brazilian chemical sector emissions, considering an analysis of mitigation opportunities in the short, medium and long term. Update of the MACC curves for the Brazilian chemical sector.
- Assessment of emerging issues and identification of possible impacts and opportunities to the sector: Revised Brazilian NDC and carbon neutrality by 2060, EU Green Deal and CBAM Carbon Border Adjustment Mechanisms, Regulatory Framework for the Carbon Market in Brazil, Global Carbon Market: Article 6 of the Paris Agreement - MDS Sustainable Development Mechanism

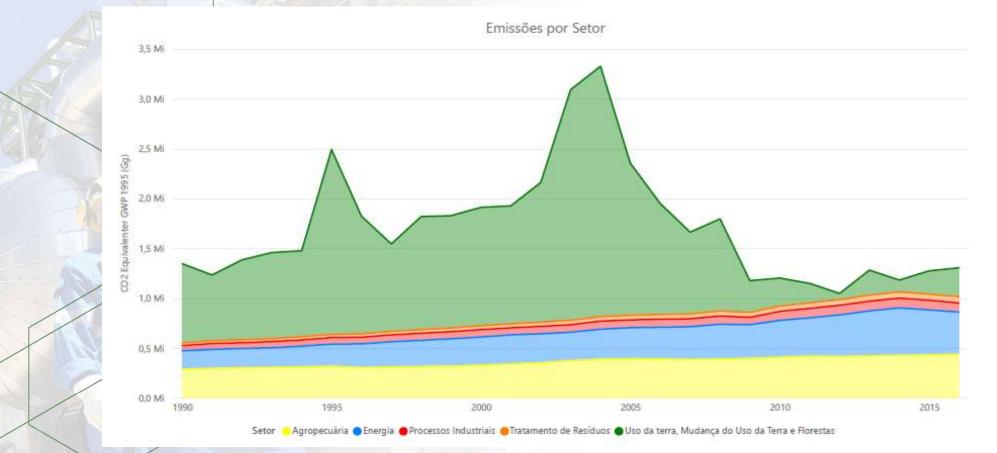
Thank you!

Aline Caldas Bressan aline.bressan@abiquim.org.br





Brazilian Policies and Measures implemented to reduce emissions



Source: SIRENE – Last reference year: 2016



Brazilian Policies and Measures implemented to reduce emissions

Low Carbon Agriculture Plan (ABC) has already allocated over R\$ 17 billion to a wide range of mitigation measures in the agricultural and animal husbandry sector, such as recovery of degraded pastures; biological nitrogen fixation; increased accumulation of organic matter, and therefore carbon, in the soil; notillage system; crop-livestock-forestry integration and agroforestry systems; and forest planting.

In 2019, **renewable sources** accounted for 83% of power generation, 46% of automobile fuel consumption, and 41% of primary energy in Brazil, this latter value corresponding to over two and a half times the world average.

Production of biofuels for transport keeps growing with the support of the **Renovabio Program**, which uses decarbonization market mechanisms to foster production and consumption of these renewable resources.

The **hydroelectric power generation infrastructure** accounts for 64% of the national installed capacity, and is the best technological solution to compensate for the intermittence and seasonality of wind, solar and biomass sources, which account for 19% of the power generation installed capacity and are experiencing rapid growth.

