DECARBOOST

Catalysing Investment to Decarbonise LAC

A Carbon Pricing Policy for Brazil

SUBTITLE (ABADI MT 28)

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CENTRO CLIMA – Centro de Estudos Integrados sobre Meio Ambiente e Mudanças Climáticas - COPPE / UFRJ

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Introduction to Organization and Presenter

- Centro Clima was founded in 2000 through an agreement between COPPE/UFRJ and the Brazilian Ministry of Environment;
- Centro Clima has been actively participating in the development of public policies and strengthening the capacity of national and international stakeholders on climate change mitigation and adaptation, at national, state and city levels;
- William Wills, PhD, is a Brazilian researcher, with postdoc in Energy Planning, and has worked for highly credible institutions such as World Bank, UNDP, UNEP, ECLAC, IIASA and WRI. He is a senior researcher at CentroClima. William is one of the Brazilian authors of the Emissions Gap Report and a reviewer of WG3/AR6.
- In 2009, William started to develop a CGE model in his PhD thesis to assess macroeconomic and social implications of carbon pricing and climate policies in Brazil;
- Since then, Centro Clima conducted several studies and projects developing long-term macroeconomic scenarios for Brazil involving stakeholders' participation;

Overview of Country Context

- The Brazilian focus on climate change issues started in 2007, when the government created a committee to draw up a National Climate Change Plan ;
- Brazil made its first commitment to reduce GHG emissions in 2009 when presenting its NAMAs pledges to the UNFCCC.
- In September 2015, Brazil submitted its Intended Nationally Determined Contribution (iNDC) to the UNFCCC.
- In April 2022, the country presented a final version of the first NDC aiming to reduce emissions by 37% in 2025 and 50% in 2030, compared to 2005 emission levels, and indicating the long-term objective of achieving climate neutrality in 2050.
- For NDC implementation, a key priority is to increase the flow of financial resources to low-carbon investments, creating mechanisms, instruments, policies, and measures to overcome various barriers.

Methodological Approach

- Methodological Approach to identify barriers and policy instruments in the economic and financial sector:
  - Literature review: Review of previous national mitigation studies and low-carbon scenario exercises;
  - Identification of the most relevant mitigation actions in each sector;
  - Identification and selection of the key barriers affecting the performance of the most relevant mitigation actions;
  - Mapping of stakeholders and undertaking of the expert consultation process (through telephone, email, virtual meetings, semi-structured and structured interview scripts);
  - Collection and processing of responses to the consultation process;
  - Selection of Barriers to be addressed and Policy Proposals to overcome them.

Stakeholder's Participation

- The application of this methodological framework was based on expert judgment by the Centro Clima team and validated by the stakeholders consulted.
- The previous experience of Centro Clima with multi-stakeholder engagement in the scenario-building teams (SBT), was particularly valuable.
- Key stakeholders were consulted throughout 2020 and 2021 to update the analysis and validate the prioritization of barriers and policy proposals, according to two key criteria:
  - merit (GHG avoided emissions potential, implementation cost and co-benefits of the related mitigation actions) and
  - feasibility (acceptability and operational aspects).

Governamental Bodies	Business Sector	Scientific Community	NGOs	TOTAL
6	10	5	3	**24**

Financial and Economic Barriers and Instruments

Mitigation Actions	Barriers Identified	Policy Instrument Proposals
Eliminate Fossil Fuel Subsidies	- Opacity of tax expenditures. - Lack of transparency about the methodologies used to measure subsidies by the Brazilian Federal Revenue (RFB). - All exemptions regimes and regional tax exemptions lack greater transparency in the details of sectors and sub-sectors benefited and values.	Approval of the legislative proposal that puts an end to the fiscal secrecy of the beneficiaries of Tax Expenses in Brazil, which would allow identifying the beneficiaries linked to the Oil & Gas sector.
Improve Financial Policies and Regulations	- Deficiencies in legal and judicial system - Subsidized credit	In developing countries, fostering these structural conditions is even more relevant as these countries tend to have weaker legal, macroeconomic and political systems and less developed capital markets. This is particularly relevant for Brazilian policy-makers. Most barriers mentioned here are beyond the scope of this project but are worth mentioning.
Improve/establish Climate Finance Instruments	- Lack of economic instrument to stimulate low carbon investments in the productive sector - Carbon Pricing - Incipient green bonds market	- Carbon pricing - Improve structural conditions that foster the development of a bond market - The creation of Smart Financial Mechanisms that operates at the early stages of investment, reducing risks and capital costs.

Carbon Pricing Scheme

- **Carbon pricing was selected as the main instrument** for an in-depth analysis due to its advanced state of discussion in Brazilian society.
- In the last decade, **several studies simulated the introduction of a carbon pricing scheme in the Brazilian** economy and tested different configurations.
- Some of these studies had the active **participation of large stakeholder groups** from across Brazilian society.

Carbon Pricing Scheme

- Previous experiences in Brazil:
  - **PMR Brazil Project** was an initiative of the World Bank to prepare developing countries for the future implementation of a carbon pricing policy. In Brazil, the project was coordinated by the Ministry of Economy, and involved around 100 stakeholders. CentroClima simulated 8 scenarios and analyzed the macroeconomic and social impacts of adopting 7 different carbon pricing schemes to achieve the NDC goals.
  - **The Emissions Trading Simulation (FGV)** is a carbon pricing exercise that was offered to more than 400 professionals the opportunity to operate in a fictitious cap-and-trade carbon market.
  - **CEBDS (**The Brazilian Business Council for Sustainable Development) organized a letter in which 135 Brazilian companies supported a more ambitious NDC and the implementation of a carbon market.
  - **Bill 528/2021 authored by deputy Marcelo Ramos, institutes the Brazilian Market for Emission Reduction (MBRE). The text is being processed in the Chamber of Deputies.**
  - **Decree 11,075/2022 – First step towards the regulation of a domestic carbon market.**

Carbon Pricing Scheme

- **CentroClima conducted several studies and stakeholders' consultations** regarding the implementation of a **Carbon Pricing policy in Brazil**, including the PMR Brazil project.
- Main results and conclusions of those studies include:
  - The **Carbon Pricing policy should be applied to all GHG emissions** from **fossil fuel use and industrial processes** (GHG emissions from AFOLU and Waste sectors would be out of its scope).
  - To meet Paris agreement targets (**carbon neutrality in 2050**) the carbon price could start at 9.5/tCO2e in 2025; grow linearly to **19 USD/tCO2e in 2030**; to 34 USD/tCO2e in 2040 and **49 USD/tCO2e in 2050**.

Carbon Pricing: Design Elements

- According to previous studies conducted by CentroClima (including results from the PMR Brazil project) **a Carbon Pricing policy should**:
  - **Be a strong long-term signal** to reduce uncertainties for the private regarding low-carbon investments;
  - **Start at a small level and increase slowly and consistently**. A stable and predictable evolution of the carbon price is desirable;
  - **Limit the exemption** of “politically sensible” sectors, with the largest possible scope;
  - **Protect exposed sectors of the economy** – a border adjustment proved to be more appropriate for Brazil as it can be precisely calculated according to the emissions intensity of each sector;
  - **Allow the use of offsets** to reduce equilibrium price on the short to medium-term but limit its use so it doesn’t hinder private investment in low-carbon technologies;
  - **Be social friendly**: Carbon pricing should be fiscal neutral, using its revenues to reduce labour taxes creating employment and increasing transfers to the poorest households to promote a just transition and reduce social inequalities;
  - **Be a hybrid carbon pricing scheme**, with a Cap-and-Trade system for industrial sectors and a Carbon Tax for the transport sectors, with a shadow price for the Power Sector.

Conclusions

- In developing countries, **fostering structural conditions is crucial** to accelerate climate finance and meet the Paris Agreement goals.
- In addition, it is necessary to **improve transparency** and reform fossil fuel subsidies, **improve climate legislation**, create **smart finance mechanisms** and establish a **carbon pricing** mechanism in Brazil.
- **Political acceptance** of the carbon pricing instrument is critical, and it **depends on** the **balance** reached between the country's **mitigation** and **development goals**.
- In the **real world**, the political economy of the carbon pricing agenda will likely require that **carbon revenues be split between** different ends, with an emphasis on allocating revenues to **reduce labour taxes** and generate new jobs and **offset the negative impacts** of the carbon pricing scheme on the **purchasing power** of low-income families.

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Catalisando Investimentos para Descarbonizar a LAC

Obrigado

Gracias

Thank you

Com o apoio do

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com base em uma decisão do Parlamento Alemão

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