



Task Force 04

TRADE AND INVESTMENT FOR SUSTAINABLE AND INCLUSIVE GROWTH

CBAM Challenges and Opportunities: A Case Study of the Brazilian Fertiliser Sector

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Abstract

Carbon pricing is one of the most effective instruments available to guide economies toward low-emission trajectories. Despite the increased introduction of this instrument, the International Monetary Fund (IMF) emphasises that carbon pricing poses several risks for carbon-intensive sectors. These risks are especially material for countries that do not yet have carbon pricing instruments in place. In this context, the implementation of the EU Carbon Border Adjustment Mechanism (CBAM), which started its first phase in October 2023, is a key initiative to observe. It covers the emission-intensive sectors of cement, aluminium, fertilisers, power energy production, iron and steel, and is designed to function in parallel with the EU's Emissions Trading System (EU ETS), to mirror and complement its functioning on imported goods. For non-EU competitors that are not subject to the same environmental/climate standards and export to Europe, it is a major challenge. According to a study developed by the United Nations Conference on Trade and Development, G20 countries are among the most vulnerable to CBAM, including Russia, China, Turkey, India, Brazil, the US, etc. This policy brief sheds light on the Brazilian fertiliser sector as an example to assess (i) the challenges and opportunities resulting from CBAM with a special focus on the promotion of social inclusion and food security, and ii) the specific opportunities and challenges for Brazilian SME's in this sector and its supply chain. The assessment results are discussed in terms of the relevance of the group of impacted G20 countries. Recommendations for action by the G20 group and the finance and sherpa tracks to increase climate-ambitious and positive distributional impacts of CBAM will be elaborated.

Keywords: Climate Change, Carbon pricing, CBAM, fertiliser sector, Brazil, group of impacted G20 countries



Diagnosis of the Issue

Designed to meet the isonomy requirements of the World Trade Organisation (WTO), the Carbon Border Adjustment Mechanism (CBAM) is part of the European Fit for 55 package (EC, 2024a). It was initiated by the EU to avoid carbon leakage, i.e., the displacement of local production to countries with less stringent climate policies (Santos and Santos, 2021), following the ambition to achieve climate neutrality by 2050.

The mechanism will work as follows: EU importers will need to buy CBAM certificates corresponding to the carbon price that would have been paid if the goods had been produced under the EU domestic carbon pricing rules, that is, representing the tonnage of CO₂ emissions embedded in the goods they import (EC, 2024a). The price of CBAM certificates will mirror the EU Emissions Trading System (EU ETS) price, being calculated by the average auction price of EU ETS allowances. If non-EU producers can prove that they already paid for the carbon used in the production, the cost can be fully deducted for the EU importer (EC, 2024d). The mechanism came into force in October 2023 and initially covers imports from the cement, iron and steel, aluminium, fertiliser, electricity, and hydrogen industries, starting with a transitional disclosure-only phase (EC, 2024b).

With the announcement of the CBAM implementation by the EU in July 2021, several countries exporting to the EU have been concerned about the possible impacts on exports. According to a study carried out by the United Nations Conference on Trade and Development (UNCTAD), Brazil is the eighth most exposed country to CBAM, and the most affected country in Latin America (UNCTAD, 2021). In addition, the UNCTAD study highlights the scale of the impact of the European measure on trade from 2023

onwards and concludes that the G20 countries are among the most vulnerable to the mechanism (T20, 2023), including: Russia, China, Turkey, India, and the USA.

This T20 policy brief focuses especially on the impacts of CBAM on the fertilizer sector, as the agriculture and land-use sectors are priority sectors for Brazil and further emerging economies of the G20. Within and beyond the group of G20, international cooperation is strong in the agricultural sector to promote food security, boost agricultural productivity, and mitigate the impacts of climate change. In addition, the G20 Agriculture working group met at the end of February 2024 to present the priority agendas. It highlighted the focus on the sustainability of the agri-food systems and the expansion of international trade relations as key instruments for combating hunger and guaranteeing food security, fundamental issues for the G20 countries, especially for developing countries (Brasil Agro, 2024).

The fertiliser sector is of high relevance for Brazil as its national production has historically been much lower than domestic demand and the country is the fourth largest consumer of fertilisers in the world (Farias et al., 2021). Around 80% of the fertilizers used in the country are imported, and this dependence on foreign supplies leaves Brazil exposed to various factors, such as the exchange rate, which can cause price fluctuations and lead to uncertainties in the supply. However, the national fertiliser market is expected to grow significantly in the coming years as a result of the National Fertiliser Plan 2050 – PNF 2050 (Brasil, 2021), implemented by the Ministry of Agriculture and Livestock (MAPA) that aims to reduce the country's dependence on fertiliser imports for agribusiness by increasing the competitiveness of fertiliser production and distribution in Brazil in a sustainable manner. The fact that this sector is subject to CBAM and there is still no carbon pricing instrument in place in Brazil will have a major impact on this policy.



Recommendations

This section presents policy recommendations for the Sherpa Track and the Finance Track.¹ The international trade agenda and different initiatives are of high significance for both tracks to foster a just climate and sustainability transition.

Specific policy recommendation for the Sherpa Track

- WG Agriculture:
 - **Recommendation 1: Address biodiversity concerns and just-transition pathways towards green innovation in agriculture**

Fertilisers are a traditional and large-scale key component of energy and agrifood systems, especially in emerging economies with high negative impacts on biodiversity and CO₂ emissions. To relieve pressure on global biodiversity resources goes hand in hand with relieving the socio-economic impacts of CBAM. Policies must seek to reduce the environmental impacts of fertilisers on biodiversity. Additionally, "just transition" opportunities for stakeholders, such as small farmers, consumers and other groups affected by higher food costs, lack of green technology or other fertilisers impacts should be raised to increase acceptance and positive social impacts. The measures that need to be taken are very similar to the ones needed for making new demand-driven market access and due diligence regulations work for all (such as the new EU Regulation on

¹ These recommendations are in line with the following Climate & Company report (2024): [Greening Trade - Making New Global Trade Agendas Work for a Just Climate and Sustainability Transition](#).

Deforestation-free products – EUDR (EU, 2024e). It is expected that more G20 countries will be following the EU’s lead and establish due diligence laws (Global Canopy, 2024).

- **Recommendation 2: Look at new business opportunities resulting from CBAM taxes**

CBAM taxes highly intensive fertilisers production. That also means that countries that are not highly affected can benefit from gains in scale and potential markets. Thus, the implementation of CBAM could be an opportunity for countries advocating for climate-oriented agriculture systems, and organic and biofertilisers boost in their national policies. To make these business opportunities accessible for SMEs and small farmers, in addition, policies should strengthen the agency and role of local communities in rural and urban gardens and recognise the significant role of family farming, peasants, indigenous, and traditional communities in food systems.

- WG Trade and Investment:

- **Recommendation 1: Promote sustainability and inclusive growth on global trade policies and investments**

As stated by the New Delhi Declaration (2023), commercial and environmental policies must be mutually supportive and consistent with the rules of the World Trade Organization (WTO), not representing unjustifiable obstacles to trade. As time is of the essence in the fight against climate change - to avoid time-consuming conflicts - CBAM and further upcoming similar initiatives of G20 countries/regions should function as an "investment instrument" for sustainability, where it induces fairness and equitable sustainable requirements, and where the tax revenue is recycled and reinvested on the improvements of global value chains.



- **Recommendation 2: Strengthen cooperation and “fair play” among nations**

Due to the prospect of changes in global trade balance, fostering a strong sectoral agreement for the fertiliser industry regarding cooperation, facilitation and investments could strengthen sustainable trade among G20 nations to send a direct price signal to the relevant actors of the sector. Such cooperation could level the playing field beyond G20 nations, promoting sustainable global trade growth and inclusive value chain gains while ensuring the availability of necessary fertilizers for those who need them (Climate and Company, 2024).

Specific policy recommendation for the Finance Track

- WG Sustainable Finance:

- **Recommendation 1: Advancing on taxonomies in support of carbon border taxes**

While work on taxonomy alignment is ongoing at G20 level, there is no agreement on one standardized or interoperable framework yet. Common taxonomies can guide trade policy makers and negotiators by outlining, sector by sector, the most material environmental risks and impacts, and should hence be explicitly considered in trade agreements (EC, 2024c). They can also ultimately help create trust in the "fairness" of measures like carbon border taxes.

- **Recommendation 2: Promote, enable and facilitate sustainable finance and investments – with the help of CBAM**

Sustainable finance refers to the integration of sustainability aspects into the decision-making processes of financial market players. However, although the financial sector

already offers a wide variety of sustainable investment products, it is known that it still needs to allocate an unprecedented volume of resources and facilitate its access to guarantee a fair and sustainable energy transition. In addressing challenges such as escalating prices and potential competitiveness concerns, the CBAM could serve as a pivotal factor. However, it's imperative to acknowledge that additional climate finance, along with international and multilateral financial assistance, may be indispensable for alleviating price shocks and food insecurity in the most vulnerable nations.

- WG International Financial Architecture:
 - **Recommendation 1: Advance on transparency and data**

Building trust between international partners and different policy spheres is essential to unlock trade's massive potential for the climate, environment and sustainability. This requires transparency based on comparable and meaningful data, which can be generated by effective sustainable finance instruments such as disclosure frameworks (Climate and Company, 2024). This data is instrumental in shaping useful sustainable trade instruments through improved policy design and equitable international collaboration.

- **Recommendation 2: Support and strengthen task forces on disclosure frameworks and standards**

Sustainable finance instruments, specifically disclosure regulations and taxonomies, can greatly facilitate sustainable trade by enhancing transparency and setting benchmarks and standards to report, evaluate and compare the environmental performance and footprint of economic activities and the associated traded commodities, goods and services. Disclosure framework standards and their effective implementation through

national regulation are key instruments for enhancing transparency on environmental impacts and risks along supply chains.

Scenario of Outcomes

From the eight policy recommendations for the Sherpa and the Financial Tracks, four main scenarios can be outlined:

- **Scenario 1: Rearranging the architecture of the international fertiliser trade**

One plausible scenario is that CBAM could reshape the global trade dynamics of fertilizers, potentially fostering a more equitable balance. Furthermore, this shift may spark a "race" towards low-carbon and sustainable solutions, presenting opportunities for certain emerging economies to thrive. If this desired outcome occurs, the concerns countries have expressed regarding the impacts of CBAM, recognizing its implications not only for exports but also for domestic and socioeconomic factors, need to be addressed proactively by the G20. This includes concerns such as the asymmetrical competitiveness between larger and smaller companies, as well as between those equipped to navigate regulatory requirements and those lacking such resources. Considering that the volatility of energy prices, compounded by the reverberations of conflicts, war, and climate change, has already heightened sensitivity to fluctuations in fertilizer prices.

- **Scenario 2: Development of new carbon pricing instruments (CPIs) around the world and scenarios of revenue recycling**

A further plausible scenario is that the adoption of CPIs, such as carbon markets or carbon taxes, will increase around the globe due to CBAM. These developments may



have major impacts on the transparency and tangibility of the generated revenues of CBAM (as the first-of-a-kind mechanism), combined with revenue recycling. Distributional and economic effects of a carbon tax depend on how the generated tax revenue is used. One scenario is that CBAM revenue could be used for measures such as tax cuts and investments in sustainable innovation and infrastructure worldwide. Also, by following the EU's example and imposing a carbon price in their own jurisdictions (and on their trade-exposed commodities), other countries can collect this revenue instead. The G20 can play a key role in facilitating a dialogue to balance opposing (economic) interests that lead to benefits for all and, most importantly, to ambitious and effective measures against climate change.

- **Scenario 3: Improving fertilisers industry through green technological development and efficient management**

Some fertilisers tend to have a much higher carbon footprint than others, reason why different technological and managerial scenarios need to be evaluated. However, globally, there are many opportunities to improve its production, usage, and efficient management that could reduce impacts on the environment, upscale profit and green technology use, and enhance inclusive growth, as already discussed by some G20 countries such as Brazil. One scenario is the reduction of the consumption of nitrogen-based fertilisers and a push of organic and bio-fertilisers through national policy and advocacy, climate financing and cooperation. This scenario brings greening production and trade, and cooperation to advance diversification and innovation, e.g., smart-climate agriculture and high-level technologies, such as precision application for improving nutrient uptake and health, and pivotal changes on hard-to-abate technology costs.



- **Scenario 4: Remodelling the dynamics of the agricultural value chain to guarantee access to finance, food-energy-water security and health**

Another CBAM scenario concerns potential negative impact on the dynamics of agricultural value chains and food security. Could CBAM create an additional and asymmetrical division between larger and smaller companies? Could this new mechanism ultimately deepen social inequalities between countries even further, possibly increasing the risk of food insecurity? How will the most vulnerable groups access finance to attend new regulations? These are broadly discussed worries within emerging economies among the G20 countries like Brazil that need to be addressed with adequate provision of information, capacity-building and economic countermeasures within the G20. Furthermore, considering that fertilisers are a key component not only for food but also for fuel production, the current volatility of fertiliser prices due to Russia's war with Ukraine also brings uncertainties about the future of (bio)fuel policy in countries like Brazil, as well as its impact on the management of water resources, which are necessary for biofuel production. In addition, CBAM will cover scope 1 GHG emissions for all CBAM products, but will also consider scope 2 emissions for some products such as imported fertiliser. In this sense, changes can be observed in the agricultural value chain and, therefore, in the international architecture of fertiliser production, depending on the configuration of the electricity matrix of the producing countries.



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