



## Greening Trade 16

# Turning the EU's Carbon Border Adjustment Mechanism into a green development tool

## Executive Summary

The EU Carbon Border Adjustment Mechanism (CBAM) has sparked considerable debate. While the EU views it as necessary to prevent carbon leakage, many developing and least developed countries (LDCs) have criticised it for being protectionist, discriminatory, and unjust.

This policy brief calls for a shift away from these seemingly irreconcilable positions, towards a more constructive approach to the CBAM. The EU should adopt a more development-friendly approach to its green policies, which must go hand-in-hand with a degree of pragmatism from developing countries and LDCs.

After outlining recent developments with regards to the CBAM, this policy brief zooms in on how adopting a pragmatic approach could take the shape of conducting CBAM Impact Assessments. The authors suggest key elements that such assessments should cover, highlighting how this will enable going beyond the current EU's one-size-fits-all approach, and they provide relevant examples. While developing countries and LDCs should be responsible for

carrying out CBAM Impact Assessments, the Commission should provide the technical and financial support necessary to assist countries in doing so.

Further, this brief sets out concrete suggestions on the role of the Commission in tackling the CBAM's development dimension. It should entail fine-tuning financial and technical assistance according to developing countries' level of exposure and vulnerability to CBAM and stepping up ongoing support efforts. As the end of the transition period of CBAM approaches, the EU should make more concrete commitments, notably by considering using all or at least part of CBAM revenues to support partner countries with high levels of exposure and vulnerability to CBAM, as suggested by Europe Jacques Delors in spring 2020.

By stressing the need for effective responses from both the EU and its trading partners, this brief presents a pathway for using CBAM as a tool for green development.

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## 1. Introduction

The European Union (EU)'s Carbon Border Adjustment Mechanism (CBAM) is a tool to fight carbon leakage by equalising the carbon price between domestic and imported products. It has been at the centre of discussions to strengthen the trade-climate-development nexus.<sup>1</sup> From the EU Commission's perspective, the CBAM is necessary to avoid carbon leakage – at least as long as the EU's climate objectives surpass the ambition of its trading partners. From the side of many developing countries and least developed countries (LDCs), the CBAM is predominantly considered a protectionist and discriminatory instrument that unfairly burdens developing countries and LDCs.<sup>2</sup>

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<sup>1</sup> Official Journal of the European Union, [Regulation \(EU\) 2023/956 of the European Parliament and of the Council of 10 May 2023 establishing a carbon border adjustment mechanism](#), L 130/52, 16.05.2023 [CBAM Regulation]

<sup>2</sup> For purposes of readability, this paper uses the generic term "developing countries" and Least Developed Countries (LDCs) following the WTO classification's system. At times, we use more specific developing country categories based on the World Bank's classification Index, to differentiate between different types of developing countries and LDCs. We recognise that Small Island Developing States (SIDS), which are grouped in the middle/high income categories, are particularly vulnerable to climate change, and tend to have low levels of adaptability. Thus, some of the observations relevant to middle and low-income countries might also be applicable to SIDS.

As we have argued in our previous paper "*EU trade and the environment: Development as the Missing Side of the Triangle*", there are numerous ways in which the EU can respond to criticisms raised by developing countries and LDCs against its green trade measures, including the CBAM.<sup>3</sup> The EU can shift the narrative from climate ambition to climate justice and be more proactive in considering developing countries and LDCs' trade dependence on the EU.

Yet this would only be one part of the solution. A more development-centric approach to CBAM must go hand-in-hand with a pragmatic approach from developing countries and LDCs, shifting the emphasis away from predominantly criticising the CBAM to identifying how their countries can best respond to it. To do so, developing countries and LDCs should conduct a CBAM Impact Assessment, which could be part of a country's overall decarbonisation strategy and include an analysis of a country's levels of exposure and vulnerability to the CBAM. This would enable developing countries and LDCs to be better positioned to minimise any negative implications of the CBAM, while

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<sup>3</sup> Pascal Lamy, Geneviève Pons, Colette van der Ven, Cláudia Azevedo, "[Greening Trade 14 - EU trade and the environment: Development as the missing side of the triangle](#)", Europe Jacques Delors, 2 June 2023.

leveraging it as an opportunity to advance domestic decarbonisation priorities.

The CBAM will have different implications for emerging economies with more capacity to adapt and decarbonise, and for LDCs that tend to be more vulnerable.<sup>4</sup> CBAM Impact Assessments carried out by the trading partners will be essential to fine-tune the EU's technical and financial assistance. This assistance should better reflect the heterogeneity of the EU's trading partners and the different ways in which the CBAM will impact them.

This paper zooms in on what a more proactive approach towards CBAM from developing countries and LDCs on the one hand, and from the EU on the other, could look like. After a quick overview of the state of play, this paper proposes how CBAM Impact Assessments could be conducted by developing countries and LDCs. It highlights the basic elements that these assessments should include while identifying how these will differ depending on whether the country is classified as an upper-middle income, lower-middle income, or low-income in line with the World Bank's country classifications.<sup>5</sup> Following this analysis, this policy brief provides concrete suggestions on the role of the European Commission in reinforcing the CBAM's development dimension. By focusing on how both developing countries and LDCs, as well as the EU should respond to the CBAM and address its adverse

impacts, respectively, this paper aims to move towards a more pragmatic approach to the CBAM as a tool for green development.

## 2. The CBAM – State of play

The CBAM – a historic first in regulating carbon-intensive imports – is a key component of the “fit for 55” package of legislation designed to reduce the EU's net greenhouse gas emissions by at least 55% by 2030 compared to 1990s levels.<sup>6</sup> It introduces a carbon price on selected imported goods (at this stage: cement, iron and steel, aluminium, fertilisers, electricity and hydrogen) that is equivalent to the carbon price on EU domestically produced goods under the EU's emissions trading system (ETS). The EU ETS functions as a cap-and-trade system designed to lower emissions through a carbon market. In turn, the CBAM is designed to mirror and complement the EU ETS, requiring EU importers to buy CBAM certificates to cover the price difference between the carbon price paid in the producer country (if any) and the price of carbon allowances under the EU ETS.

The CBAM regulation, in effect since 1 October 2023, stipulates a transitional period up to 2026. During this transitional phase, importers are only required to report embedded emissions in imported goods every quarter. After 1 January 2026, the financial obligations envisaged by the CBAM will come into effect and a CO<sub>2</sub> levy will gradually be imposed on selected imported goods.<sup>7</sup> The CBAM's scope is expected to expand over time. In the run-up to the definitive period, the Commission will assess the mechanism's functioning, including the possibility of extending it to other goods covered by the ETS. It will also

<sup>4</sup> Boston Consulting Group, “[Why Emerging Markets Need to Prepare for the EU's New Climate and ESG Regulations](#)”, International Trade Article, 14 November 2024; The African Climate Foundation, “[EU's CBAM: Africa Could Lose Up To \\$25b Per Annum as a Direct Result](#)”, News and Analysis, 9 May 2023.

<sup>5</sup> Under the World Bank's latest classification index, a country is a low-income country if its Gross National Income (GNI) per capita is lower than USD 1,135; a lower-middle income country if its GNI per capita is between USD 1,136 and USD 4,465; an upper middle-income country if its GNI per capita is between USD 4,466 and USD 13,845; and a high-income country if its GNI per capita surpasses USD 13,845. See Nada Hamadeh, Catherine van Rompaey, and Eric Metreau, “[World Bank Group country classifications by income level for FY24 \(July 1, 2023- June 30, 2024\)](#)”, World Bank Blogs, 30 June 2023.

<sup>6</sup> European Commission, “[Fit for 55: Delivering on the proposals](#)” (last accessed on 21 March 2024)

<sup>7</sup> European Commission, Taxation and Customs Union, “[Carbon Border Adjustment Mechanism](#)” (last accessed on 21 March 2024).

evaluate its impact on developing countries, especially on LDCs, and the effects of any technical assistance provided.<sup>8</sup>

// *After the planned transition period, the European Commission will assess the mechanism's functioning, including the possibility of extending it to other goods covered by the EU Emissions Trading System.*

The transitional phase is intended as a learning period aimed at gathering data and one that will inform the regulation's upcoming review. During this phase, importers have at hand several flexibilities, including the option to use default values if they lack the necessary data. The first set of default values was published by the Commission last December and will undergo regular revisions based on collected data and feedback from EU and non-EU producers.<sup>9</sup>

Numerous challenges arose during the first reporting cycle, with less than 10% of German importing companies submitting reports by the official deadline of 31 January 2024 according to Germany's emissions trading authority.<sup>10</sup> Following a deadline extension due to technical difficulties faced by businesses, the Commission registered nearly 13,000 report submissions by the end of February. However, it is too early to assess the compliance rate at this stage.<sup>11</sup>

Finally, the CBAM's ripple effects are already evident around the world, with countries such as Brazil, India, Indonesia, and Turkey developing their own domestic emissions trading schemes.<sup>12</sup> The UK has also announced its plans to implement a CBAM from 2027.<sup>13</sup>

## 3. Responding to CBAM – Options for developing countries and LDCs

### 3.1. The importance of undertaking CBAM Impact Assessments

The CBAM has generated severe criticism from developing countries and LDCs, which was mostly centred around the potential adverse impact on their exports to the EU. Criticism also stems from broader issues related to climate justice and perceptions of green imperialism.<sup>14</sup> These concerns are not without merit and must be taken seriously, and adequately addressed. At the same time, the CBAM is here to stay, and it is, therefore, in the interest of developing countries and LDCs to focus on adopting a pragmatic response to it.<sup>15</sup>

This can be done by preparing country-specific assessments – either a stand-alone CBAM Impact Assessment or an assessment that is embedded within a country's broader trade and decarbonisation strategy. This assessment

<sup>8</sup> Article 30 (2) of the CBAM Regulation.

<sup>9</sup> European Commission, "Default Values for the Transitional Period of the CBAM between 1 October 2023 and 31 December 2025", Brussels, 22 December 2023.

<sup>10</sup> Alice Hancock, "World's first carbon border tax shows teething problems", Financial Times, 1 March 2024.

<sup>11</sup> Ibid. European Commission, "Update: Technical issues related to the CBAM Transitional Registry and Import Control System 2 (ICS2)", News Article, 29 January 2024.

<sup>12</sup> IETA, "International Reaction to the Carbon Border Adjustment Mechanism", IETA Report, April 2024; Alessandro Vitelli, "EU CBAM Nudges Countries to Establish Carbon Markets", Czapp, 15 November 2023.

<sup>13</sup> Gov.uk, "Factsheet: UK Carbon Border Adjustment Mechanism", Consultation outcome (last accessed 21 March 2024).

<sup>14</sup> Pascal Lamy, Geneviève Pons, Colette van der Ven, Cláudia Azevedo, "Greening Trade 14 – EU trade and the environment: Development as the missing side of the triangle", Europe Jacques Delors, 2 June 2023.

<sup>15</sup> Alfonso Medinilla, "CBAM strategies and developing countries", ECDPM, LinkedIn Article, 1 March 2024.

should identify a country's level of exposure and vulnerability to CBAM, while exploring synergies between the EU mechanism and national trade and climate priorities. The Commission, as well as international development agencies, should, in turn, provide financial and technical support to developing countries and LDCs to carry out such impact assessments.

A CBAM Impact Assessment would enable a developing country or LDC to anticipate and mitigate potential negative implications of the CBAM, while leveraging it as a springboard to accelerate green industrial development domestically. Indeed, such an assessment might flag up specific industries with high and/or low levels of exposure and vulnerability. A better understanding of the CBAM's domestic implications would allow a country to more keenly identify its decarbonisation priorities.

***A CBAM Impact Assessment would enable a developing or least developed country to anticipate and mitigate potential negative implications of the CBAM, while leveraging it as a springboard to accelerate green industrial development.***

For the Commission, the availability of CBAM Impact Assessments will enable it to go beyond a one-size-fits-all approach to trading partners and facilitate more tailored technical and financial assistance. Indeed, as outlined in the paragraphs below, there is a correlation between a country's level of development and its exposure and vulnerability to the CBAM. The EU should take these factors into account when it comes to its CBAM country-engagement strategies.

### 3.2 Factors to consider in a CBAM Impact Assessment

***The first step for countries to develop a CBAM Impact Assessment is to measure their level of exposure.***

The first step for countries to develop a CBAM Impact Assessment is to measure their level of exposure. Different approaches can be adopted to do so. A 2021 UNCTAD paper defines total exposure as the product of the carbon tariff on carbon-intensive exports to the EU and the share of total exports to the EU.<sup>16</sup> The World Bank has developed a tool, the CBAM Exposure Index ("the Index"), to calculate a country's CBAM exposure for a particular good. This is done based on (i) the share of a country's exports of CBAM-covered products to the EU; and (ii) the embodied carbon payment of export to the EU, which reflects carbon intensity of production and assumed cost of CBAM certificates.<sup>17</sup> The Index measures both absolute exposure, i.e., the total potential costs of certificates for a country's exporters, and relative exposure levels, which reflects the effect of CBAM on a country's competitiveness in EU markets.<sup>18</sup>

The World Bank tool is freely available and can be easily used to draw up a country- and product-specific exposure plan. In conducting an exposure study, it would be important to make calculations not only for products that are currently covered by CBAM but also for a wider product scope, in line with how the mechanism is predicted to develop. Moreover, in their exposure assessments, countries should aim to also include indirect exposure to CBAM, i.e., the effect of CBAM on

<sup>16</sup> UNCTAD, "A European Union Carbon Border Adjustment Mechanism: Implications for developing countries", UNCTAD/OSG/INF/2021/2, July 2021.

<sup>17</sup> The World Bank, "Technical Notes for the CBAM exposure index", Brief, 15 June 2023.

<sup>18</sup> Maryla Maliszewska et al., "How developing countries can measure exposure to the EU's carbon border adjustment mechanism", World Bank Blogs, 15 June 2023.

countries that export primary commodities to a third country, which makes downstream products and exports these to the EU.<sup>19</sup> Indirect exposure is not currently included in the World Bank Exposure Index and could lead to an underestimation of the CBAM exposure calculations.

According to the World Bank Exposure Index, countries with the highest level of CBAM exposure are Kazakhstan, Egypt, South Africa, China, Bahrain, Russia, Cameroon and Mozambique.<sup>20</sup> Low-income countries have the lowest exposure rates, reflecting the fact that their exports of CBAM-covered goods to the EU are relatively few. An exception is Mozambique, which exports 97% of its aluminium to the EU, and have a higher-than-average emission intensity.<sup>21</sup> Accordingly, when focusing only on direct emissions, Mozambique has very high levels of CBAM exposure.<sup>22</sup> When specific industries have high levels of exposure to CBAM, reducing their vulnerability, including through decarbonisation, must be prioritised, whereas low levels of exposure to CBAM would give a developing country more leeway to prioritise other parts of a country's climate agenda, such as adaptation. Indeed, prioritisation will be important for many developing countries and LDCs, as they have limited budgets and high levels of sovereign debt.<sup>23</sup>

<sup>19</sup> For example, if country A exports primary steel to country B, which turns it into downstream products like rolled steel to be exported to the EU, then country B will likely request CBAM certificates from country A exporters – even if country A does not directly export to the EU.

<sup>20</sup> *Ibid.*

<sup>21</sup> Jonathan Munemo and Eugene Bempong Nyantakyi, "Letter: Spare a thought for Africa's carbon-intensive industries". 10 April 2024. Financial Times. Available at: <https://www.ft.com/content/8c3cd589-8c3a-4f8e-adf6-1bd0d92edb2e>.

<sup>22</sup> However, CBAM exposure of Mozambique drops when taking into account indirect emissions, given that Mozambique relies on hydropower for its electricity generation. See Maryla Maliszewska et al., "How developing countries can measure exposure to the EU's carbon border adjustment mechanism", World Bank Blogs, 13 June 2023.

<sup>23</sup> This also includes SIDS, which suffer from high levels of sovereign debt.

*A second step in developing a CBAM Impact Assessment is understanding a developing or least developed country's level of vulnerability.*

A second step in developing a CBAM Impact Assessment is understanding a developing country or LDCs' level of vulnerability, that is, its ability to adapt to the CBAM. This involves looking at different factors, including, but not limited to, a country's ability to reduce the carbon intensity of the economy, the country's capacity to engage in monitoring, reporting and verification (MRV), the availability of carbon pricing mechanisms, and the country's potential for export diversification.<sup>24</sup>

*Many low-income and/or lower-middle income countries do not have the capacity to decarbonise their industrial sectors, given that fossil fuels are often the cheapest and most accessible energy source.*

Typically, levels of CBAM vulnerability are linked to a country's level of development, with upper-middle income countries generally having a greater ability to adapt to CBAM than lower-middle income and low-income countries. Indeed, many low-income and/or lower-middle income countries do not have the capacity to decarbonise their industrial sectors, given that fossil fuels are often the cheapest and most accessible energy source.<sup>25</sup> Moreover, decarbonisation requires access to capital investments, which are not as readily available in low-income countries. This is, in part, because of their limited ability to attract Foreign Direct Investment (FDI), high cost of capital, and

<sup>24</sup> Eicke et al., "Pulling up the carbon ladder? Decarbonization, dependence, and third-country risks from the European carbon border adjustment mechanism", Energy Research & Social Science, 80, 2021.

<sup>25</sup> *Ibid.*



high levels of sovereign debt.<sup>26</sup> In addition, technologies required for decarbonisation are often expensive to access in low and middle-income developing countries due to the geographic concentration of patents for environmentally sound technologies. Indeed, 85 per cent of the industrial companies that developed green patents were concentrated in Japan, followed by China, the United States, Germany, and the Republic of Korea. Industrial companies from developing countries – excluding China – held less than 2 per cent of green patents.<sup>27</sup> This creates a challenge for locally-owned companies in developing countries to access the relevant technologies in a cost-effective manner. Attracting more multinational investment in the energy sectors or in high-carbon intensive industries covered by CBAM could be one way to alleviate this problem.

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CBAM vulnerabilities are further linked to a country's natural resources. For instance, many African countries are richly endowed with hydro, wind, and solar resources. This means the continent could supply renewable energy for local and global consumption, "provided these sectors receive sufficient investments".<sup>28</sup> A handful of African countries also enjoy a comparative advantage in supplying green hydrogen, i.e., hydrogen produced using electricity generated by renewable energy resources to split water molecules into hydrogen and oxygen.<sup>29</sup> Green hydrogen and its derivatives, such as ammonia, can be used as feedstock for low-carbon industries, fuel for shipping and aviation, and as an energy carrier to be converted back into electricity.<sup>30</sup>

By strategically investing in these renewable resources, African countries could leverage their solar and wind potential, green their electricity grid as well as energy infrastructure sectors, and become major exporters of hydrogen, ammonia, and other derivatives.<sup>31</sup> Box 1 provides an example of how South Africa is seeking to strategically invest in green hydrogen, exemplifying what a pragmatic approach to CBAM would entail.

<sup>26</sup> FDI in LDCs, which fell to 20/25 billion per annum after a peak was reached in 2015, accounts for only 3 per cent of developing country inflows, and 2 per cent of global inflows. See UNCTAD, "Investment Flows to LDCs Affected Disproportionally by Global Crises." Global Investment Trends Monitor, no. 45. 6 March 2023; See, e.g., Avinash Persaud, "Unblocking the green transformation in developing countries with a partial foreign exchange guarantee", Climate Policy Initiative, 7 June 2023.

<sup>27</sup> Alejandro Lavopa and Maria de las Mercedes Menendez, "Who is at the forefront of the green technology frontier? Again, it's the manufacturing sector", UNIDO Policy Brief Series: Insights on Industrial Development, Issue no. 6., October 2023.

<sup>28</sup> Cesar Augier et al., "Green Energy in Africa presents Significant Investment Opportunities", McKinsey & Company, 17 October 2023.

<sup>29</sup> *Ibid.*

<sup>30</sup> Affonso Medinilla and Koen Dekeyser, "Green hydrogen: The Future of African Industrialization?", ECDPM, 18 March 2024.

<sup>31</sup> *Ibid.*

### Box 1: Investing in green hydrogen in South Africa

South Africa is one of the countries most exposed to CBAM. The iron, steel, and aluminium sectors are particularly vulnerable, given South Africa's reliance on the EU market, as well as the high carbon intensity of these sectors.<sup>32</sup> Under the EU's CBAM, these commodities are at risk of high financial penalties when exported to the EU.

South Africa is actively pursuing a hydrogen economy, which could reduce CBAM exposure and vulnerability within hard-to-abate sectors. What's more, it could be an important source of exports and economic growth within the country. In 2021, South Africa launched the "Hydrogen Society Roadmap for South Africa", a report outlining short-, medium-, and long-term targets for developing a globally competitive hydrogen economy. Among other things, it focuses on the decarbonisation of hard-to-abate domestic industries, such as the steel, iron, and cement sectors.<sup>33</sup> This was followed by the publication of a "Green Hydrogen Commercialisation Strategy" in 2023, which aims to position South Africa as a major producer and exporter of green hydrogen.<sup>34</sup> It is projected that by 2050, the development of a national hydrogen economy in could contribute 3.6 per cent of South Africa's GDP and create 380,000 jobs.<sup>35</sup>

At the regional level, South Africa together with Egypt, Kenya, Morocco, Mauritania, and Namibia, launched the Africa Green Hydrogen Alliance in 2022. This initiative aims to foster collaboration among African nations, facilitate capacity-building and financing, and provide regulatory frameworks for green hydrogen development on the continent. While it focuses both on export markets and building domestic hydrogen economies, there seems to be an implied sequencing in the strategy, with an initial focus, on developing hydrogen exports, and subsequently, on decarbonising domestic industry.<sup>36</sup> This reflects, in part, the fact that green hydrogen is not yet cost-competitive.

Developing a green hydrogen industry is also part of the South Africa's Just Energy Transition Partnership (JETP), launched in 2021. Under this initiative, France, Germany, the United Kingdom, the United States, and the EU have pledged USD 8.5 billion in funding to support South Africa's decarbonisation efforts, with a focus on the country's electricity system.<sup>37</sup> Part of the emphasis on green hydrogen production in South Africa and other countries is motivated by the EU's interest in securing such hydrogen imports. In fact, the EU has adopted ambitious targets of producing 10Mt domestically and importing another 10Mt of hydrogen by 2030.<sup>38</sup>

The fact that South Africa is actively focused on developing its green hydrogen industry is a great example of how to strategically reduce CBAM vulnerability, while, at the same time, creating economic opportunities. That said, the commercialisation of green hydrogen is still in its infancy, and major hurdles must be overcome for Africa to unleash the industry's full potential.

<sup>32</sup> Seutame Maimele, "Responding to the European Union's Carbon Border Adjustment Mechanism (CBAM): South Africa's vulnerability and responses", Trade & Industrial Policy Strategies (TIPS), 10 August 2023.

<sup>33</sup> South African Department of Science and Innovation, "Hydrogen Society Roadmap for South Africa 2021", South Africa Hydrogen Valley Final Report, October 2021.

<sup>34</sup> Republic of South Africa, "SA's Green Hydrogen Commercialisation Strategy approved by Cabinet". 19 October 2023.

<sup>35</sup> Rico Salgmann et al., "Green Shipping fuels made in South Africa". World Bank Blogs. 29 November 2023.

<sup>36</sup> Bitsat Yohannes-Kassahun, "Green Hydrogen to Fuel Africa's Rise – Hard Truths and Key Questions", United Nations, Office of the Special Adviser on Africa (last accessed 21 March 2024); Alfonso Medinilla and Koen Dekeyser, "Green hydrogen: The Future of African Industrialization?" ECDPM. 18 March 2024.

<sup>37</sup> European Commission, "France, Germany, UK, US and EU launch ground-breaking International Just Energy Transition Partnership with South Africa", Press Release, Brussels, 2 November 2021.

<sup>38</sup> Alfonso Medinilla and Koen Dekeyser, "Green hydrogen: The Future of African Industrialization?", ECDPM, 18 March 2024.



Another relevant factor impacting the vulnerability levels of countries is whether a country has adopted a domestic carbon price, either as a carbon tax or an emission trading scheme (ETS). Such schemes enable a country to retain parts of the CBAM revenues collected by the EU, while simultaneously reducing carbon emissions domestically. Other approaches are also being considered. For example, India is currently considering adopting an export tax on carbon emissions – aiming for the funds otherwise collected by CBAM to remain in India, while exempting domestic industries from the carbon tax (see box 2).

The effectiveness of a carbon pricing mechanism will also depend, in part, on the price that each country places on carbon. While many national governments are adopting carbon pricing policies, these are generally significantly lower than the EU's carbon price and might not be a sufficient deterrent to reduce carbon emissions. Moreover, a prerequisite for putting in place a carbon pricing mechanism is having the ability to engage in monitoring, review and verification (MRV), which can be challenging, especially for businesses in lower-middle income and low-income developing countries. Additionally, a carbon tax might not always be the most effective tool for facilitating a country's green transition, especially in low-income countries with negligible GHG emissions.<sup>39</sup> In these situations, some have argued that funds could be better utilised in developing green infrastructure.<sup>40</sup>

Unsurprisingly, carbon pricing mechanisms appear to be directly correlated with a country's level of development. According to data from the World Bank dashboard, 38 carbon pricing mechanisms have been implemented in high-income countries, followed by 9 in upper-middle-income countries, 1 in lower-middle income countries, and zero in low-income countries.<sup>41</sup>

// ***A country's potential to export to alternative markets without similarly stringent carbon tax requirements also impacts its CBAM vulnerability.*** //

Finally, a country's potential to export to alternative markets without similarly stringent carbon tax requirements also impacts its CBAM vulnerability. However, this is often more difficult for countries at lower levels of development that lack the capacity to adapt their production systems to new markets and new standards.<sup>42</sup>

<sup>41</sup> CGD analysis of [World Bank carbon price dashboard](#), accessed November 2023. Notes: In the 2022 data, there were 26 LICs, 54 LMICS, 54 UMICs, and 83 HICs. Only regional and national schemes are included in the analysis. The EU's ETS covers 30 countries (27 EU Member States plus Iceland, Liechtenstein and Norway) and these are included in the HIC bar. Countries are counted only once. See Samuel Pleeck and Ian Mitchell, "The EU's Carbon Border Tax: How Can Developing Countries Respond?", Blog post, Center for Global Development, 15 November 2023.

<sup>42</sup> Pascal Lamy, Geneviève Pons, Colette van der Ven, Cláudia Azevedo, "Greening Trade 14 - EU trade and the environment: Development as the missing side of the triangle", Europe Jacques Delors, 2 June 2023.

<sup>39</sup> Mitota P. Omolere, "Explainer: What is a Carbon Tax, Pros and Cons, and Implementation Around the World", Earth.org, 9 January 2024.

<sup>40</sup> Ibid.

### Box 2: India's Carbon Export Tax

Approximately 27 per cent of India's iron, steel, and aluminium exports, valued at 8.2 billion US dollars, were destined for the EU in 2022. Hence, the CBAM is expected to significantly impact India's exports of energy-intensive items, posing a challenge to the country's metal industry.<sup>43</sup>

To keep CBAM revenues "at home" and avoid potential negative implications for domestic industry, India is currently considering adopting a carbon export tax. This would entail taxing exported goods by the same amount as the liability under CBAM, while exempting goods sold in the domestic market. According to India's Trade Minister, the idea is to "collect the tax in India itself and use it for our green energy transition, which will indirectly help the same exporters then transition to cleaner energy and bring down their carbon footprint, there will be no additional CBAM tax at the European border".<sup>44</sup>

While India is considering this proposal as a response to CBAM, several ambiguities remain. For instance, it is an open question whether a CBAM export tax would be deductible under Article 9 of the CBAM Regulation. In addition, the proposed export tax might also raise questions about consistency with international trade rules, including the WTO and/or a possible future FTA between India and the EU.

In addition, India has currently in place an energy savings credit scheme called Perform Achieve Act (PAT), which seeks to reduce energy consumption in energy intensive industries.<sup>45</sup> This scheme is in the process of being transitioned to a Carbon Credit Trading Scheme.<sup>46</sup>

When conducting CBAM Impact Assessments, countries should take on board all of the above factors. Countries should engage in cost-benefit analyses geared to adopting different decarbonisation approaches, carbon pricing mechanisms, export diversification strategies, and their MRV capacity. They should focus on the short- and long-term costs and benefits of these different approaches, both with regards to economic, and environmental strategies. The appropriate response to the CBAM is not to consider the CBAM in isolation, but to assess how any policy response to CBAM fits within a country's wider industrial strategy, export promotion plan, investment promotion strategy, and climate policy.

<sup>43</sup> Global Trade Research Initiative, "[The Carbon Border Adjustment Mechanism, EU's Climate Trojan Horse to Obstruct Imports](#)", GTRI Report, March 2023.

<sup>44</sup> The Hindu, "[CBAM will kill EU manufacturing, India will have its own carbon taxes: Goyal](#)". 2 November 2023.

<sup>45</sup> Bureau of Energy Efficiency, Government of India. "[Perform Achieve Trade \(PAT\)](#)". Accessed on 22 April 2024.

<sup>46</sup> Archana Rao, "[Can India's CCTS address the CBAM challenge?](#)" 3 July 2023.

## 4. Responding to developing countries' challenges and opportunities – Options for the EU

### 4.1 Going beyond a "one-size-fits-all" approach

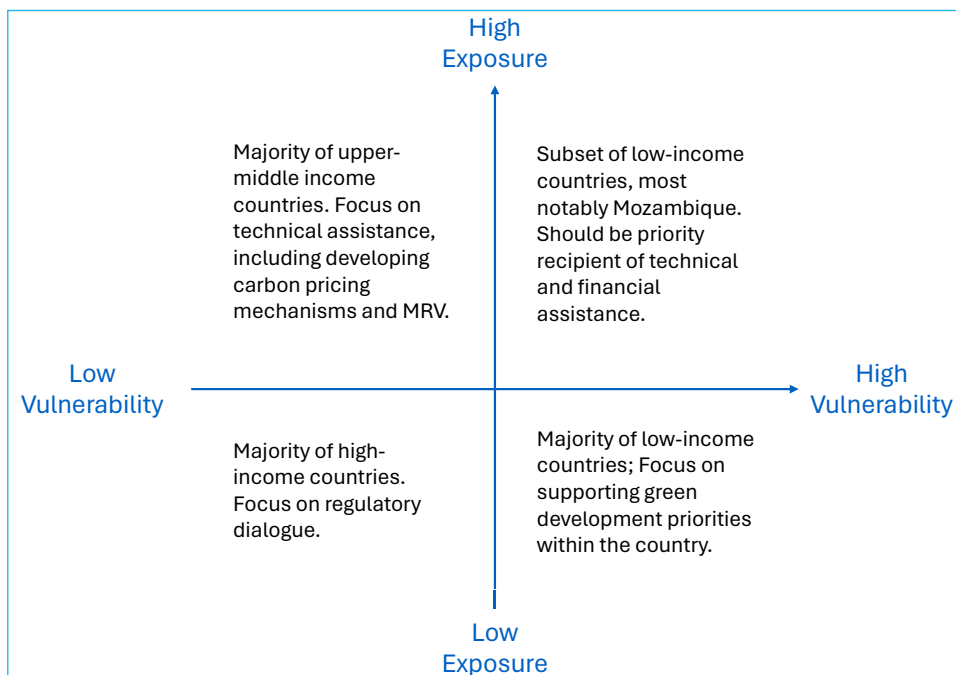
As explained in the previous section, developing countries and LDCs should adopt a proactive approach to CBAM. However, to effectively leverage CBAM as a catalyst for green development, this proactive approach must go together with a similarly constructive approach on the EU's side. In particular, the EU should acknowledge the difficulties trading partners face in adapting to CBAM. Given the limited time and resources available for countries across the world to adapt to CBAM, targeted and tailored EU support will be crucial.

// *While developing and least developed countries should be responsible for carrying out CBAM Impact Assessments, the Commission should provide technical and financial support.*

First, while developing countries and LDCs should be responsible for carrying out CBAM Impact Assessments, the Commission should provide the technical and financial support necessary to assist countries in doing so. Second, CBAM Impact Assessments would constitute a good basis for the Commission to fine-tune any technical and financial assistance it provides according to developing partner countries' levels of exposure and vulnerability to CBAM, as further explained below (see also Figure 1).

- For developing countries and LDCs with **high exposure levels** and **high levels of vulnerability**, such as Mozambique, priority assistance should be provided to reduce their vulnerability levels to CBAM. For these countries, assistance should focus on decarbonising domestic energy-intensive industries most impacted by the CBAM, in line with country-specific opportunities and challenges identified in the assessments.

- For developing countries and LDCs with **high exposure levels** and **lower levels of vulnerability**, which will mostly be upper-middle income countries, financial assistance will be less important. However, there would still be a key role for the Commission to play in providing technical assistance to support decarbonisation within the country. This would include assisting them with the development of carbon pricing mechanisms, as well as training businesses to effectively engage in monitoring, reporting, and verification processes.
- For developing countries and LDCs with **low exposure levels**, but **high levels of vulnerability**, which tends to include the majority of low-income countries, the EU should allocate resources to support green development priorities within the country. This will likely be a combination of action on both climate adaptation and mitigation, even if a country is not likely to be immediately impacted by the CBAM. This will be critical to ensure that they are not left behind in the green transition, as well as to fulfil international finance climate commitments made under the UN Framework Convention on Climate Change (UNFCCC) and the Paris Agreement.



**Figure 1:**  
*Tailoring technical and financial assistance to countries' CBAM exposure and vulnerability levels*



- For high-income countries with **low exposure levels**, and **low levels of vulnerability**, there would be no need for technical or financial assistance. Instead, the focus should be on regulatory dialogue between the countries.

## 4.2 Stepping up technical and financial assistance in practice

The EU is already engaging in multiple financial assistance schemes, such as through the Global Gateway, the Just Energy Transition Partnerships (JETPs), and development cooperation programmes.<sup>47</sup> Going forward, the Commission should leverage these schemes to scale up support to developing country trading partners, particularly those with high levels of exposure and vulnerability to CBAM, such as Mozambique and the Gambia, expected to be among the most impacted in Africa.<sup>48</sup> The EU should engage in more bilateral partnerships on renewable energy with developing countries so as to help them green their grids and decarbonise energy-intensive sectors covered by CBAM. This would, in turn, contribute to lowering or rendering to zero the price to be paid by exporters.

This approach allows for fine-tuning commitments according to partner countries' national decarbonisation priorities and any specific risks identified in CBAM assessments. In the case of Mozambique, this could entail assisting the country in its plans to develop a green hydrogen economy, which is set to play a key role in decarbonising the Mozambican economy according to the country's Energy Strategy Plan presented last year.<sup>49</sup>

These partnerships should be designed to accelerate decarbonisation in strategic domestic industries with high export sensitivity to CBAM, as well as to promote local industry development. Besides, they could serve to build regional supply chains and facilitate the distribution of clean energy to neighbouring countries. For instance, presently, the biggest aluminium industry in Mozambique uses electricity supplied from South Africa's grid.<sup>50</sup> Therefore, greening South Africa's grid could indirectly contribute to decarbonising the energy-intensive aluminium industry in Mozambique, thus reducing the country's exposure and vulnerability to CBAM, even before it embarks upon its own decarbonisation efforts.

Box 3 showcases the potential of these partnerships to decarbonise domestic energy-intensive industries by using the EU-Egypt strategic partnership on green hydrogen as an example.<sup>51</sup>

// *The EU should engage in more partnerships on renewable energy with developing countries.* //

<sup>47</sup> For instance, the European Commission has been supporting the modernisation of two hydropower plants in Mozambique and their extension by solar technology. Besides, within the framework of the EU-Africa Green Energy Initiative, the Commission has recently launched a tender for the construction of a National Control Centre for Energy Infrastructure in Mozambique. See European Commission, "Global Gateway in Sub-Saharan Africa", (Modernisation of two hydropower plants in Mozambique), (last accessed on 2 April 2024); European Commission, "EU-African Green Energy" (last accessed 2 April 2024).

<sup>48</sup> The African Climate Foundation and LSE Firoz Lalji Institute for Africa, "Implications for African countries of a Carbon Border Adjustment Mechanism in the EU", 2023.

<sup>49</sup> Lusa, "Mozambique: Government hopes to lead hydrogen production by 2030", Club of Mozambique, 16 February 2024.

<sup>50</sup> Pamela Machado, "EU carbon tax prompts 'green aluminium' claims in Mozambique", Climate Home News, 3 July 2023.

<sup>51</sup> European Commission, "COP27: EU and Egypt step up cooperation on the clean energy transition", Press Release, 16 November 2022.

**Box 3: EU-Egypt strategic partnership on green hydrogen**

In 2022, the EU and Egypt boosted their cooperation on clean energy transition by establishing a strategic partnership on green hydrogen. A key element of this partnership is that it goes beyond facilitating the EU's plan to import green hydrogen from Egypt to "supporting Egypt's pathway to low emissions and climate resilient development (...) to accelerate the Egyptian energy sector's transition and decarbonisation".<sup>52</sup>

Going forward, this partnership could play a key role in mitigating CBAM's adverse effects in Egypt. It could be leveraged to facilitate the upgrade of industrial processes and introduce green hydrogen in key Egyptian industries exposed to CBAM, such as the fertiliser and iron and steel sectors.<sup>53</sup> Indeed, Egypt's industrial sector relies heavily on gas, rendering its exports vulnerable to the CBAM. Around 6% of Egypt's exports fall under the CBAM, including three-quarters of iron and steel exports, 70% of aluminium exports and half of fertiliser exports.<sup>54</sup>

**// The EU should make more concrete commitments, in terms of tech transfers and financial support available to support CBAM implementation in developing and least developed countries.**

Existing support mechanisms are scattered across EU programmes and managed by different Commission services. They seek to promote broader decarbonisation objectives, fostering compliance with the CBAM only indirectly. Thus, many of these mechanisms fall short of tackling issues specifically related to the regulation's implementation. A more unified and comprehensive approach is required. As the transitional period comes to an end, the EU should, where required, make more concrete commitments, notably in terms of tech transfers and the financial support available to support CBAM implementation in developing countries and LDCs. Besides, it should step up technical assistance to support developing countries in establishing effective

<sup>52</sup> European Commission, "Memorandum of understanding on a strategic partnership on renewable hydrogen between the European union and the Arab republic of Egypt", General Publications, 16 November 2022.

<sup>53</sup> Alexandra Gritz and Guntram B. Wolff, "CBAM, Hydrogen Partnerships and Egypt's Industry: Potential for Synergies", Volume 59, 2024 Number 2 JEL Q48, F18, O14, 2024, Intereconomics.

<sup>54</sup> Baker et al., "Designing an African response to Carbon Border Adjustment Mechanisms", Conference Paper, 1 November 2023.

MRV systems. While only direct emissions (except for electricity) are covered by CBAM at this stage, it is important to start training exporters to monitor and calculate both direct and indirect emissions of covered goods in preparation for the future expansion of the regulation's scope.

**// The Commission should consider establishing a dedicated fund to support partner countries with a high level of exposure and vulnerability to CBAM.**

To carry out these activities, the Commission should consider establishing a dedicated fund – the EU Green Support Fund, or an Equitable Decarbonisation Fund – using all or at least part of CBAM revenues, as argued in our first publication on CBAM in spring 2020, to support partner countries with high levels of exposure and vulnerability to CBAM.<sup>55</sup> While suggestions to do so have been made, it is not currently included in the CBAM Regulation. During the ongoing

<sup>55</sup> Pascal Lamy, Geneviève Pons, Pierre Leturcq, "Greening EU Trade 3 – A European Border Carbon Adjustment Proposal", Policy paper, Europe Jacques Delors, June 2020; Jonathan Munemo and Eugene Bempong Nyantakyi, "Letter: Spare a thought for Africa's carbon-intensive industries". 10 April 2024. Financial Times; Pascal Lamy, Geneviève Pons, Colette van der Ven, Cláudia Azevedo, "A pro-development green trade agenda for COP-28", Greening Trade 15 Policy Paper, Europe Jacques Delors, 2 June 2023.



ing CBAM transition phase, the CBAM should be amended to include, as a legal obligation, that all or at least part of CBAM revenues will be used to support developing countries. In addition, the Commission could work with Member States to set up a Team Europe Initiative (TEI), mirroring the approach adopted for the European Regulation on Deforestation-free products (EUDR). In November 2023, the EU and contributing member states launched a TEI on deforestation-free value chains with an initial package of €70 million in new funding to provide technical assistance and capacity to partner countries on key issues such as traceability, geo-localisation and land-use mapping which are critical to tackling deforestation and implementing the EUDR.<sup>56</sup> Similarly, in the case of CBAM, a “Team Europe Initiative on decarbonising energy-intensive industries” could support partner countries in setting up domestic emissions monitoring systems and training exporters on how to calculate emissions, thereby facilitating compliance with the CBAM.

### // A dedicated Team Europe Initiative could support partner countries in setting up domestic emissions monitoring systems and training exporters to calculate their emissions.

Developing countries, such as India and Indonesia, which rank among the top 20 CO<sub>2</sub> emitters, require a different approach.<sup>57</sup> In these cases, the EU should prioritise helping partner countries set up domestic carbon pricing mechanisms. The Commission has already taken steps in this direction, by launching a taskforce on carbon markets led by the Directorate-General for Climate Action (DG CLIMA), as part of the Commission’s recommendation for the new 2040 emissions reduction target. The objective

of this task force is to develop a global approach to carbon pricing and carbon markets.<sup>58</sup> According to the EU’s Climate Commissioner Wopke Hoekstra, via this task force, the EU “will embark on a significant effort to help out countries in the world that do have appetite for something that either looks like EU ETS or might be slightly different in its design.”<sup>59</sup>

How this new initiative will be set to work remains to be seen. However, it should go beyond promoting alignment with the EU’s model to also explore equivalences with carbon pricing policies already in place in partner countries. Other platforms for dialogue, such as the EU-India Technology Council, should also be leveraged for this purpose, and replicated for other countries as required, since they enable a *sui generis* approach and provide an avenue for more in-depth discussions and cooperation on carbon pricing.<sup>60</sup>

Finally, the CBAM has come into place against the background of unfulfilled climate finance commitments by developed countries, which failed to mobilise the USD 100 billion per year by 2020, as pledged at the 15th UNFCCC Conference of Parties (COP15) in 2009.<sup>61</sup> The EU should thus boost technical and financial support to LDCs, in line with commitments under Article 9 of the Paris Agreement. While most LDCs are not particularly exposed to CBAM, they are nevertheless highly vulnerable to climate change and lack the technological, technical, and financial capabil-

<sup>56</sup> European Commission, “Global Gateway: EU and Member States launch global Team Europe Initiative on Deforestation-free Value Chains”, News Announcement, 9 December 2023.

<sup>57</sup> Global Carbon Atlas, [Global Carbon Emissions](#), Global Carbon Project (last accessed 21 March 2024).

<sup>58</sup> European Commission, “Commission presents recommendation for 2040 emissions reduction target to set the path to climate neutrality in 2050”, Press Release, 6 February 2024.

<sup>59</sup> Kate Abnett, “EU to step up efforts for more carbon markets worldwide”, Reuters, 13 February 2024.

<sup>60</sup> During the first meeting of the EU-India Trade and Technology Council, the parties agreed to “intensify their engagement to address the issues that emerge in the implementation of carbon border measures”. See European Commission, [EU-India Joint Statement 1<sup>st</sup> Meeting of the Trade and Technology Council](#), 16 May 2023.

<sup>61</sup> Organisation for Economic Co-operation and Development (OECD), “[Climate Finance and the USD 100 Billion Goal](#)” (last accessed 21 March 2024)



ities to take strong climate action. It is the EU's responsibility to support its trading partners if it is to remain a global frontrunner when it comes to climate action.

*// The EU should boost technical and financial support to least developed countries, in line with commitments under Article 9 of the Paris Agreement.*

## 5. Conclusion

Both the EU and developing and least developed countries impacted by the CBAM should take a pragmatic approach to this new regulation during and after the transitional period. For developing countries and LDCs, conducting a comprehensive CBAM Impact Assessments would help them better understand their levels of exposure and vulnerability and identify their decarbonisation priorities. At

the same time, the European Commission should scale-up and fine-tune its technical and financial assistance approach relevant to decarbonisation and CBAM. Indeed, the implications of CBAM for different countries will significantly depend on the country's level of development and their resources for adaptation. These CBAM Impact Assessments will be critical if the Commission is to adopt a more tailored approach to assistance, one which reflects the heterogeneity of the EU's trading partners and the different ways in which the CBAM will adversely impact them.

By focusing on both the role of developing countries and LDCs, and that of the EU in strengthening the development dimension of the CBAM, the political debate could move away from discussing the relative merits and disadvantages of the CBAM and focus more on the underlying challenges and opportunities related to decarbonisation, trade competitiveness, and development. Only by adopting a pragmatic approach and by ensuring sufficient engagement from both the EU and its trading partners can the CBAM be leveraged as a genuine tool for green development.

### Disclaimer

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