

**EU's Carbon Border Adjustment
Mechanism: Implications for the
Developing World**

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1. Introduction

The climate crisis has been looming over the world for years, but countries are now realising the dire need to change their outlook on how to fight this crisis. Historically, importance has always been given to improving the economic strength of a nation, usually by improving GDP. This is the goal most governments worked for to show strength of their economies. However, economic strength alone is no longer a sustainable goal. Focus is now being given on how to mitigate the impact of the climate change on a country's economy and how to reduce its adverse impacts. In this regard, an important development took place in December 2015, when the Paris Agreement was signed by over 190 countries. This is a "legally binding international treaty" with all countries to work towards achieving the goal of reducing carbon emissions and also reducing the impact of climate change.

The European Union (EU) is working towards reducing carbon emissions and to achieve carbon neutrality targets. For this, the EU has set several ambitious goals, the most prominent one being "Fit for 55". Under this, they aim to reduce carbon emissions by 55% of the 1950 levels by 2030 and achieve carbon neutrality¹ by 2050. To achieve this, the EU has introduced a policy called Carbon Border Adjustment Mechanism (CBAM), as part of the EU's Green Deal². The CBAM aims to put a fair price on carbon emissions during production of goods entering the EU³.

This paper provides an analysis of the CBAM with focus on introduction of CBAM, its need, and mechanisms, and also its implications on LDCs and developing countries.

2. Methodology and Structure of the Paper

The aim of this paper is to provide a comprehensive understanding of the *Carbon Border Adjustment Mechanism* and its implications on other economies, particularly on India. The paper primarily relies secondary literature and publically available documents, including research papers, reports, articles, among others. In doing so, the paper also reviews two research papers published on the issue.

¹ Carbon neutrality means that CO₂ (no other greenhouse gases) released into the atmosphere from human activity is reduced and remaining CO₂ is balanced by an equivalent amount being removed. Source: Journalism for the Energy Transition, <https://www.cleanenergywire.org/factsheets/devil-detail-basics-company-climate-claims>

² The European Green Deal is a package of policy initiatives, which aims to set the EU on the path to a green transition, with the ultimate goal of reaching climate neutrality by 2050.

³ *Carbon Border Adjustment Mechanism*. (n.d.). Language selection | Taxation and Customs Union. https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en

Besides the introduction and the methodology, the paper structured into five sections. Section 3 sheds light on the introduction of CBAM, its need, and mechanisms. It also reviews previous measures adopted by the EU towards ensuring reduced carbon footprint. Section 4, seeks to understand theoretical implications of CBAM based on two studies done on the topic. The two studies are (a) a study by Branger and Quirion in 2014 on Carbon Border Adjustment Mechanisms and Their Economic Impact on Finland and the EU and (b) a UNCTAD study that modelled CBAM in the GTAP (Global Trade Analysis Project) to assess the tax values for countries Global Trade Analysis Project (GTAP). Section 5 describes implications of CBAM on other countries, including LDCs and Developing Countries. Section 6 analyses implications of CBAM on India, and Section 7 provides conclusion and way forward.

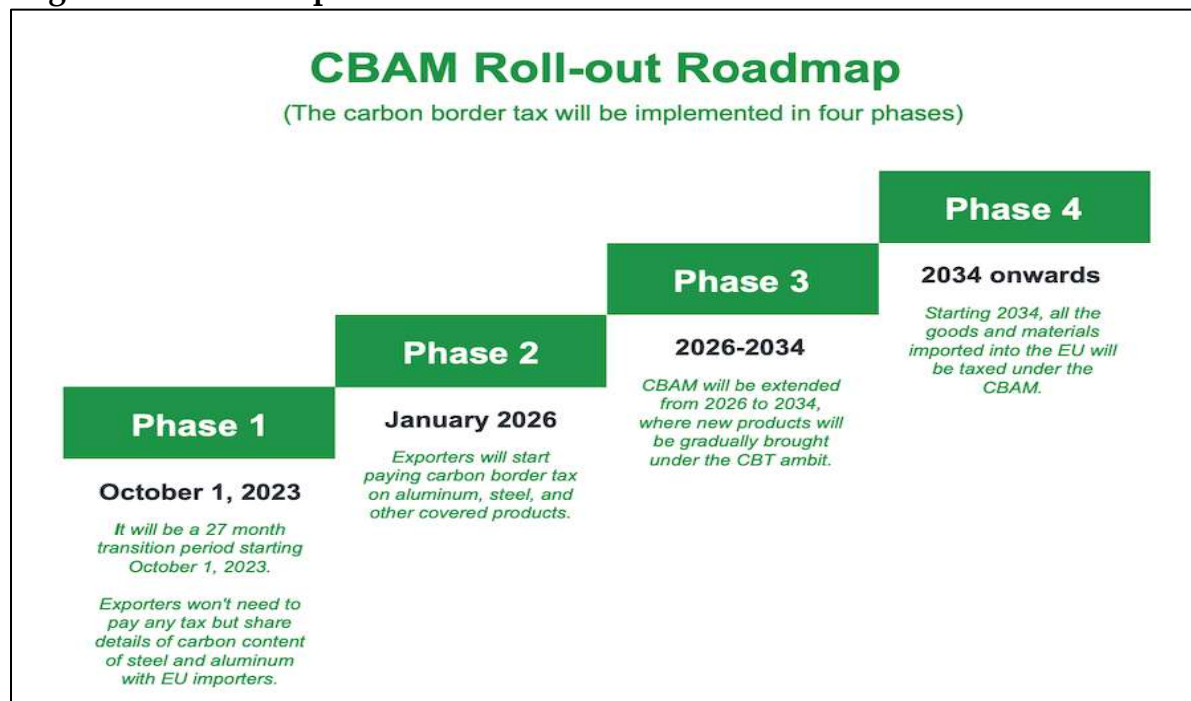
3. An Introduction To CBAM

The Carbon Border Adjustment Mechanism intends to put a fair price on products entering the EU. CBAM is considered to be the EU's landmark tool to fight carbon leakage and one of the central pillars of the EU's ambitious Fit for 55 Agenda. It seeks to equalise the price of carbon between domestic products and imports. Further this measure intends to ensure that the EU's climate policies are not undermined by production relocating to countries with less ambitious green standards or by the replacement of EU products by more carbon-intensive imports. It is also mentionable that CBAM is a WTO-compatible measure that encourages global industry to embrace greener and more sustainable technologies.⁴ Its inbuilt WTO compliance feature makes it unquestionable under the WTO, implying that countries trading with the EU countries have to comply with this.

This measure is to be implemented in phases, with the first phase having started in October 2023 (See Figure 1 for CBAM Implementation Timeframe). This method is being followed to ensure a smooth transition of the EU economy to carbon neutrality on the one hand and for importers and producers to get sufficient time to prepare for the policy and make necessary changes on the other.

⁴ EU Press release, 29 September 2023, Brussels, Carbon Border Adjustment Mechanism (CBAM) starts to apply in its transitional phase,
https://ec.europa.eu/commission/presscorner/detail/en/ip_23_4685

Figure 1: CBAM Implementation Timeframe



Source: India Briefing, <https://www.india-briefing.com/news/eu-carbon-border-adjustment-mechanism-impact-india-business-exports-27901.html/>

An important feature of the mechanism is that while a major proportion of the revenue collected from tariffs will be utilised towards the EU general budget and to further their environmental goals, some funds may also be utilised towards low-income countries and developing countries to support and assist them with the implementation of CBAM.

The Need For CBAM

Production methods in the EU are set to be sustainable through the implementation of various policies and initiatives, one such example is the SCP (Sustainable Consumption and Production) Action Plan. A number of initiatives are launched under this such as eco-labelling, eco-management and audit, eco-design and more. Under eco-labelling, products which fit certain sustainability criteria are marked with a flower logo to make it identifiable. Eco-design directive is extremely important when it comes to clean production in the EU: “According to the European Commission ‘it is estimated that 80% of all product-related environmental impacts are determined during the design phase of a product’” (Conformance)⁵. The various stages of a product such as production and distribution have several negative environmental

⁵ Eco Design Directive EU Information and Advice. (n.d.). Conformance Ltd. <https://www.conformance.co.uk/ce-directives-information/ecodesign-directive>

impacts. By setting a directive in the initial phase, the EU aims to mitigate the environmental impact. This is implemented for products such as Air conditioners, Dishwashers, Television, Fans, Lamps and many more. Lastly, the audit system ensures proper implementation of environmental directives of the EU by companies.

The above few examples show the strict nature of the EU laws regarding sustainable production, laws that ensure producers within the EU minimise their carbon footprint. However, in adopting these cleaner production methods the cost of production also rises. This can lead to the problem of “Carbon Leakage”, one of the main reasons why CBAM is being introduced.

Under “Carbon Leakage”, companies move production out of the EU and into other countries with less stringent environmental laws to make use of more carbon intensive production methods. EU products are also being replaced by carbon intensive imported goods¹. Carbon leakage is becoming an increasingly big problem. Based on research by the Brookings Institute, high income countries are heavily importing carbon dioxide (due to production of goods imported) and developing countries are heavily exporting it.

Further CBAM aims to:

- bring about equality in carbon price of imports and carbon price of domestically produced products. Through this, the EU’s objectives are not undermined and producers cannot take advantage of the lax environmental laws in non-EU countries.
- encourage cleaner production methods in non-EU countries.

CBAM Implementation Mechanism

The initial transitional phase of CBAM has begun in October 2023, with the first reporting period for importers ending on 31 January 2024. This phase only includes products which are at high risk of carbon leakage and whose production process is carbon intensive. Products included are iron and steel, aluminium, hydrogen, cement, fertiliser and electricity (European Commission)⁴. In the initial phase, importers have to report the greenhouse gas emissions during production of goods imported and there are no financial payments to be made. The first phase is to continue until 2026.

Starting 2026, CBAM will come into full effect. Importers will be required to report the quantity of goods imported and their greenhouse gas emissions in the previous year. According to emissions in the previous year, importers have to purchase

certificates equal to the amount of emissions during production. Price of the certificates will be calculated based on “... weekly average auction price of EU ETS allowances” (C2ES)⁶.

There are also provisions for exemptions⁷ under the mechanisms. These include:

- Non-EU Countries with their own ETS, such as Iceland and Norway, will be exempted from paying a carbon tax.
- Non-EU countries with a “cap and trade” system. Under this, the government puts a cap on the volume of emissions.
- If producers can show that a price was already paid for carbon emissions, that amount will be deducted from the tax amount to be paid.

As the policy continues, more products will be added to its scope, in phases, until all products imported into the EU are included.

Previous Measures Introduced

Several measures have been adopted by the EU in the past to reduce carbon emissions from their products. Proposals and measures to combat climate change have been previously introduced within the EU, the most popular ones being The Emissions Trading System (ETS), The Carbon Inclusion Mechanism (CIM) and the Future Allowance Import Requirement (FAIR). Brief details on these are provided below.

EU’s Emissions Trading System (ETS): The EU introduced an ‘Emissions Trading System’, more popularly known as an ETS, in 2005 and this led to the creation of a carbon market within the EU. The ETS works on a *cap and trade system*- there is a fixed cap on the volume of emissions allowed in an area and the right to emit pollutants is traded among companies. “... [G]reenhouse gas allowances are treated as a commodity or product that can be traded on the EU carbon market” (EPA)⁸. The trading characteristic of the ETS created the need for carbon permits to be bought at prices which are indicated as the “carbon price”. A higher carbon price would lead to a fall in permits bought and traded by companies and additionally, a fall in greenhouse gas emissions. The cap set on emissions is reduced each year to reach

⁶ Carbon Border Adjustments - Center for Climate and Energy Solutions Center for Climate and Energy Solutions. (n.d.). Center for Climate and Energy Solutions. <https://www.c2es.org/content/carbon-border-adjustments/>

⁷ A European Union Carbon Border Adjustment Mechanism: Implications for developing countries. (2021, July 14). UNCTAD. https://unctad.org/system/files/official-document/osginf2021d2_en.pdf

⁸ EU Emissions Trading System. (n.d.). Environmental Protection Agency. <https://www.epa.ie/our-services/licensing/climate-change/eu-emissions-trading-system-/>

climate targets, this reduction in the volume of allowed emissions leads to a higher carbon price. The aim of the ETS was firstly to reduce and control GHG emissions within the EU and secondly to encourage companies to adopt and invest in emission reduction technologies.

The ETS has a provision for “free allowances”, these allowances are granted to certain companies within the ETS. However, this system of allocating free allowances will be gradually phased out with the start of the CBAM and a carbon payment mechanism will be initiated, thereby linking CBAM with the ETS.

EU’s Carbon Inclusion Mechanism (CIM): The Carbon Inclusion Mechanism (CIM)⁹, was proposed by the French Government in 2016. This policy involved including importers in the EU ETS, who were required to “surrender allowance” according to the volume of emissions by European producers. However, the sectors included had to fit three criteria: (1) a high carbon intensity and a significant share of total GHG emissions in Europe; (2) the easy determination of the carbon content; and (3) a limited impact on the downstream sector (France, 2016)” (Kuusi et al. 2020). The sector also had to have a “low trade impact” with the EU, and due to these specific criteria, the Cement sector was chosen. However, this proposal was rejected.

Box 1: Summary Table

	EU ETS	CIM
Year	2005	2016
Characteristics	Create a Carbon Market in the EU	Include sectors with a “low trade impact”, and those which satisfied certain production conditions. <i>Cement</i> was identified
Method of working	Operated in a Cap-and-Trade System wherein Greenhouse gas emissions are treated as a commodity	Surrender allowances according to emissions volume, only for a specific sector- cement was chosen
Free Allowances	Certain companies within the EU were allotted free allowances	-
CBAM	Was to be linked with the CBAM and used to phase out the free allowance system	-
Criticisms	The provision of free allowances to certain companies	The policy was not implemented, it was rejected in the proposal stage

⁹ (2020, October 29). Carbon Border Adjustment Mechanisms and Their Economic Impact on Finland and the EU.

https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/162510/VNTEAS_2020_48.pdf?sequence=1&isAllowed=y

4. Theoretical Implications of Carbon Border Adjustment (CBA) Policies⁶

A study on Carbon Border Adjustment Mechanisms and Their Economic Impact on Finland and the EU was conducted by Branger and Quirion in 2014 to assess the impact of carbon border adjustments (CBA) on carbon leakage, using a meta-analysis method. Meta-analysis is a research method which makes use of several independent studies on a topic to assess the overall trend. The paper suggested the following formula for calculation of tariffs: $CBAM = \text{weight}_{\text{imported products}} \times \text{carbon intensity}_{\text{imported products}} \times (\text{carbon price}_{\text{EU}} - \text{carbon price}_{\text{foreign country}})$. The CBA study made use of 25 previous studies and its findings showed that without CBA, the carbon leakage range was between 5% - 25% and with CBA it was between (-)5% - 15%. The results show that implementation of a CBA policy does have a significant impact in reducing carbon leakage.

Another paper titled “A European Union Carbon Border Adjustment Mechanism: Implications for developing countries” by the UNCTAD modelled CBAM in the GTAP (Global Trade Analysis Project) to assess the tax values for countries. The GTAP model has been developed by Purdue University, the university defines it as “a global network of researchers and policy makers conducting quantitative analysis of international policy issues” (Purdue University)¹⁰. The study is done in two steps. First, CO₂ emissions are assessed through direct emissions in production and indirect emissions through electricity. Next, based on the emissions value, the tax is calculated for each product in different countries and areas based on their emissions and import value. “The carbon price per tonne of emitted CO₂ of the CBAM imposing economy is multiplied by the embodied carbon emissions for each sector in every exporting economy” (UNCTAD). Three scenarios are presented for assessing the impact: (i) A carbon tax in the EU for energy intensive sectors at USD 44 or USD 88, (ii) CBAM with a carbon price of USD 44 and, (iii) CBAM with a carbon price of USD 88 (UNCTAD). The results show that a reduction in emissions in one country is offset by emissions rise in other countries as carbon intensive production shifts.

As per the study, scenario (i) resulted in reduced emissions in the EU by 434 million metric tonnes (MtCO₂), but emissions rise in other economies was estimated at 58 MtCO₂. The global net effect is a reduction in emissions by 376 million MtCO₂. In scenario (ii)- CO₂ emissions in non-EU countries reduce by 36 MtCO₂, but emissions

¹⁰ (n.d.). Global Trade Analysis Project (GTAP). <https://www.gtap.agecon.purdue.edu/>

rise in the EU by 9 MtCO₂. The reason here is that carbon intensive production will partially shift back to the EU.

5. Implications of CBAM on other countries

The UNCTAD study mentioned above clearly reveals the implications of the CBAM on under-developed and developing countries. Countries are naturally concerned about the implications of CBAM on their exports to the EU. The UNCTAD study also reveals that while exports fall by 1.4% at USD 44 and 2.4% at USD 88, the fall in exports is limited to only developing countries with their production process being carbon intensive. Further, with a (US) \$44 per tonne carbon tax, developed country incomes rise by (US) \$2.5 billion while developing countries' incomes fall by (US) \$5.9 billion" (UNCTAD). Such an implication will certainly create a gap between the developed and developing countries in terms of welfare and income:

In addition to above economic impact on exports of other countries to the EU, there are several other reasons, which would put LDCs and other countries at odds, and thus many countries are criticising CBAM on various grounds.

One of the reasons that countries are against the CBAM is the Paris Agreement, a legally binding treaty under which countries pledge to take action against climate change. Several countries have also taken collective responsibility for the environment and the damage already done. This came under the *Common but Differentiated Capacities and Responsibilities Principle*. Under this principle, most of the responsibility has been taken by developed nations. The higher level of industrialisation and development in these countries subsequently led to greater environmental damage⁷. Due to this, countries such as India, China, Brazil and South Africa regard the CBAM as unfair. These countries feel that countries which have contributed least to the climate crisis will be penalised.

Another reason countries are against CBAM is its potential conflict with WTO rules. One of the most fundamental rules of the WTO is the Principle of Non-Discrimination, under which products of different countries are not discriminated against⁷. Under the CBAM, poor and developing countries are at a disadvantaged position- this is not in line with the MFN principle listed in Article I and Article III of GATT (The General Agreement on Tariffs and Trade). Article I:1 of the GATT prohibits parties from discriminating between "like" products originating in, or destined for, any other party, whereas Article III of the GATT prohibits discrimination between domestic products and "like" imported products" (Kuusi et al. 2020)⁵.

Additionally, the CBAM is being seen as infringing on the policies and territorial sovereignty of other countries (Kuusi et al. 2020). The CBAM would require countries with carbon-intensive production to change their outlook on production to avoid penalties in the form of high tariffs. This can be in the form of revamping production technology, investing in sustainable production or even implementing governmental policies to encourage companies to reduce carbon footprint. Such requirements are perceived as indirectly imposing restrictions on countries over which the EU has no jurisdiction, all for implementation of their policy and trade benefit³.

Box 2: Latest Updates on CBAM

Recently the European Union announced a few rules for the implementation of the upcoming CBAM policy. With the transitional phasing starting October 2023, the EU has been preparing for the onset of CBAM. Detailed guidelines on how to go about reporting greenhouse gas emissions have been released. Additionally, the EU is working extensively to assist countries as they familiarise themselves with the working of CBAM. In this regard, a webinar was recently held as part of a workshop to "... help Indian exporters understand the reporting regulations ..." (Amiti Sen, 2023) of CBAM. The Government of India has strongly encouraged businesses to attend these sessions to familiarise themselves with the upcoming policy. However, the Indian government is looking to file a complaint against the CBAM with the WTO. The government states the reason as CBAM being discriminatory, against WTO-approved trade rules and a possible factor for future trade barriers.

Implications of CBAM on LDCs and developing countries

LDCs¹¹, or least developed countries, will be significantly impacted by the CBAM. Some examples include Afghanistan, Haiti, Bangladesh, and more. These countries are not developed and the environmental laws are not strict, leading to high levels of carbon emissions in their production process. The equalising nature of taxes in CBAM will hence require a high tariff to be paid by LDC nations. Moreover, the process of assessing and reporting carbon emissions in production will require additional costs and time. This leads to a more complex trading system, which can lead to trade barriers for the already disadvantaged LDCs. The EU has stated they will provide technical and financial support to help LDCs comply with the CBAM and to reduce their carbon usage in production. This is also echoed by the UNCTAD "...Least Developed Countries (LDCs), will need support to incorporate green technologies in their production processes and reduce related CO₂ emissions".

The EU is looking to give "special treatment" to LDCs, and- these countries may be exempt from the CBAM in view of the fact that these developing and under-developed countries have contributed less to the climate crisis, and it would be unfair to subject them to higher taxes for a problem they did not cause.

¹¹ The United Nations defines LDCs as "... low-income countries confronting severe structural impediments to sustainable development. They are highly vulnerable to economic and environmental shocks and have low levels of human assets.

Two other countries which are most likely to be affected by the policy are China and Russia- both these countries criticised the proposal. Russia will be the most impacted- 16.7% of CBAM covered imports are from Russia (Energy Monitor)¹² and the policy could cost Russia \$521.52 Million by 2026 (Reuters)¹³. It is expected that implications on China will be relatively less, though China has asked for the EU to justify the carbon tax at the WTO. One study by China Briefing reveals that the impact of CBAM on China's industry is quite negligible. China's exports of the CBAM products account for only 2% of its total exports to the EU¹⁴.

The position of developed countries is in sharp contrast to LDCs and developing countries. Many of these countries are considering imposing similar measures on other countries on their exports.

Responses of Countries on CBAM

There have been varying responses from countries to the EU measure. Many countries are against the proposal, calling it out as discriminatory and against the WTO approved trade practices. On the other hand, some countries are in support of the CBAM, such as the USA and Canada, and are looking to adopt similar measures in their countries. Canada recognizes the importance of carbon pricing as a tool to get countries to reduce their carbon footprint. The United States is in favour of starting a similar program in the country¹⁵.

Countries which are expected to be affected by CBAM are considering various adaptation measures to reduce impacts of CBAM on their exports to the EU. Measures adopted by some countries are presented below.

Adaptation Strategies of Countries

- a) Russia- In July 2021, The Russian Government approved a law which was to be implemented by the end of the year. The aim of this law is to monitor GHG

¹² Petkova, M. (2022, February 7). *Weekly data: EU's CBAM to impact Russia, China and the UK the most*. Energy Monitor. <https://www.energymonitor.ai/policy/carbon-markets/eus-cbam-to-impact-russia-china/>

¹³ Xu, M., Stanway, D., & Nicolaci, A. (2021, August 31). *EU's planned carbon border tax to impact Russia the most -study*. Reuters. <https://www.reuters.com/business/environment/eus-planned-carbon-border-tax-impact-russia-most-study-2021-09-01/>

¹⁴ Wu, Y. (2023, April 26). *EU Carbon Border Adjustment Mechanism Impact on China*. China Briefing. <https://www.china-briefing.com/news/how-will-the-eu-carbon-border-adjustment-mechanism-impact-china-businesses/>

¹⁵ *Is the EU's Carbon Border Adjustment Mechanism a Threat for Developing Countries?* (2022, January 13). Policy Center for the New South. <https://www.policycenter.ma/opinion/eus-carbon-border-adjustment-mechanism-threat-developing-countries>

emissions, climate projects (projects which aim to reduce GHG emissions) and set reporting rules. Companies that emit more than 150,000 tonnes of CO₂ per year have to report their total emissions. A study is being undertaken in the Sakhalin Islands in Russia in order for the country to reach its goal of carbon neutrality in 2025. Here, a carbon trading mechanism is to be tested. Additionally, green finance is gaining prominence in Russia with guidelines issued in 2021 that can categorise a project as “green” or “adaptation”, “... in essence, a taxonomy for green and sustainable investment” (Zabanova, 2021). Taxonomy would include subsidies for green loans, which would cover 60-90% of the interest rates or tax exemption for green bonds. Russian businesses have also recognized the importance of reducing their carbon footprint and are moving towards sustainable technologies to implement this- the purchase of “green certificates” is gaining popularity.

- b) UK- The UK had launched a 12-week consulting program on CBAM which came to an end on 22 June 2023. This consultation would address carbon leakage, the CBAM policy and its mechanism and certain *mandatory product standards* (for products produced in the UK). Sectors included for these consultations are cement, chemicals, glass, Iron and steel and more. Additionally, the UK also held discussions to start a CBAM policy of their own.
- c) USA- The country considered starting a CBAM policy for the US, but that possibility has not gone further. Another step the US could take is to be part of a “carbon club”. A carbon club is a group of countries who come up with a carbon pricing policy and decide a common carbon price.

6. Implications of CBAM on India

India was the EU's 10th largest trading partner in 2021, in fact the EU accounts for 14.9% of India's total exports with majority of exports in electrical goods, iron and steel, mineral fuels and oils and aluminium (European Commission)¹⁶. The downside is that the carbon intensity of Indian products is high, especially when compared to the EU. For example, average emission intensity is around 2.6 tonnes of carbon dioxide per tonne of crude steel. This is 12% higher than the global average of 2.32 tonnes (Live Mint)¹⁷. The high emissions nature of Indian production is the reason India is said to be one of the developing countries “most exposed”⁶ to CBAM, even though India's

¹⁶ *EU trade relations with India*. (n.d.). Language selection | Trade.

https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/india_en

¹⁷ Narayan, S., & Anand, S. (2023, June 23). *Icra flags CBAM hit to steel cos' profits*. Mint.

<https://www.livemint.com/news/india/icra-flags-cbam-hit-to-steel-cos-profits-11687538403597.html>

share of CBAM exported goods is only 6.51% of total exports with iron and steel and aluminium being the majority¹⁸.

The modelling study by UNCTAD estimated tariffs for different products in several countries at \$44 per tonne of carbon dioxide in the EU. India's CBA ad valorem was high: Aluminium- 5.6%, Steel- 12.6%, cement- 22.1% and fertilisers- 4.6%. India's share of CBA tariff was estimated to be one of the highest- for example, only Kazakhstan had a higher value than India for steel (17.1%). Research by the Global Trade Research Initiative (GTRI) estimates tariffs of 20-35% on the export of iron and steel, aluminium and cement from India to the EU. Currently the tariff is at less than 3%, this is quite a jump.

The projected high tariff values India will be required to pay will hurt its exports to the EU. "In fact, the UNCTAD forecasts that India will lose \$1-1.7 billion in exports of energy-intensive products such as steel and aluminium" (The Hindu)¹⁹. "CBAM to impact between 15% and 40% of India's annual steel exports which are made to Europe ... ICRA said in a report" (Live Mint). All these data points show that the volume of exports from India to the EU are projected to fall with the implementation of CBAM, this can lead to complex trade relations between the two. India has even criticised the policy calling it out as a "regressive proposal" (See Table 1 for summary of effects on Indian export to the EU).

Table 1: Summary of Effects

Carbon Intensity	12% higher than global average in India
UNCTAD Study Tax Value:	Aluminium- 5.6%, Steel- 12.6%, cement- 22.1% and fertilisers- 4.6%
Iron and Steel tariffs:	Jump from 3% to 20-35%
Export loss:	\$1-7 billion of energy intensive export loss

The next section will focus on methods for the government and Indian businesses to adapt to the CBAM and mitigate its effect.

¹⁸ *Impact of carbon border adjustment mechanism on India*. (2023, January 28). The Times of India. <https://timesofindia.indiatimes.com/readersblog/cosmopolitan/impact-of-carbon-border-adjustment-mechanism-on-india-49738/>

¹⁹ Notani, S., & Gopalakrishnan, B. N. (2023, May 18). *EU carbon rules to hurt India, others - The Hindu BusinessLine*. The Hindu Business Line. <https://www.thehindubusinessline.com/opinion/eu-carbon-rules-to-hurt-india-others/article66866988.ece>

Measures taken by India to address issues from CBAM²⁰

The Indian government is in the process of creating a carbon market, known as the Carbon Credit Trading Scheme (CCTS). Through this, the government aims to reduce greenhouse gas emissions of industries in India by trading carbon credit certificates. This policy will incentivize Indian businesses to invest in more sustainable production methods so as to reduce their carbon footprint. Due to reduced carbon emissions, the tariff amount to be paid under CBAM will also be reduced.

There are several steps India can take to adjust to the CBAM. Indian businesses should work to adapt to the policy through (i) making use of the transitional phase until 2025. They must efficiently assess their greenhouse gas emissions and analyse the data to estimate the cost of tariffs. They should also assess the administrative costs involved in calculating the costs involved in estimating greenhouse gas emissions; (ii) Based on data analysis and understanding potential costs, companies can create policies and improve operations by having exact targets to work on, and (iii) Companies must assess their capacity to comply with CBAM.

Box 3: Carbon Credit Trading Scheme to Help Indian Companies Prepared for CBAM

In addition to the above, India is also introduced the Carbon Credit Trading Scheme (CCTS) for the creation of an Indian carbon market (ICM), the aim of which is to “... decarbonize the Indian Economy by pricing the Green House Gas (GHG) emission through trading of the Carbon Credit Certificates” (Ministry of Power)²¹. This policy has been introduced as a tool to help India reach the goals stated in the Nationally Determined Contributions. An important target included here is to reduce emissions to be 45% lower than the 2005 levels by 2030. This policy came into effect on 28th June, 2023. Initially it will cover high emissions sectors such as the energy sector, later the scope can be widened to include voluntary participation by companies and industries.

The Ministry of Power defines a carbon credit as “... value assigned to a reduction or removal or avoidance of greenhouse gas emissions achieved and is equivalent to one ton of carbon dioxide equivalent (tCO₂e)²²”. The GreenHouse Gases included within the scope are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrochlorofluorocarbons (HCFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphur hexafluoride (SF₆). Additionally, a *National Steering Committee for Indian Carbon Market* has been created whose functions include finalising the rules, regulations and guidelines for implementation, to recommend to the bureau when to issue carbon credits and overall monitoring of the policy.

India is also likely to face difficulties while working in accordance with the reporting guidelines of the policy. India does not at present have any guidelines in place for reporting GHG emissions, but is slowly creating such policies.

²⁰ Bhardwaj, N. (2023, May 10). *How Will the EU Carbon Border Adjustment Mechanism Impact India?* India Briefing. <https://www.india-briefing.com/news/eu-carbon-border-adjustment-mechanism-impact-india-business-exports-27901.html/>

²¹ Press Information Bureau. (2023, May 11). Press Information Bureau. <https://pib.gov.in/PressReleasePage.aspx?PRID=1923458>

²² (2023, June 22). <https://egazette.gov.in/WriteReadData/2023/246859.pdf>

It's necessary for companies to create strategies to mitigate the impact of CBAM. Steps which may be contemplated by them are (i) Companies should start working towards cleaner and more sustainable manufacturing methods. This would involve investing in renewable sources of energy and more carbon efficient technologies to reduce the overall emissions. (ii) Efficient supply chain management is necessary to mitigate any of its negative effects on the environment. Supply chain consists of numerous steps (Transportation, warehousing, storage and more) whose impact can be environmentally degrading. Companies can reduce their carbon footprint by working actively to make the entire supply chain process sustainable. (iii) Business operations should be diversified so as to increase the reach of the company way beyond the EU.

7. Conclusion

The EU is very ambitious with its goals for sustainability and the upcoming CBAM policy is a perfect example of this. While it has been met with criticism by several countries, the EU will still go through with the transitional phase starting end 2023. While there will be a positive impact of this mechanism on reducing carbon emission, it is a concern that the mechanism is mainly driven by the implementation of carbon pricing within the EU. Further, the issue is not just in regards to paying high tariffs but also the administrative and other costs involved in forecasting the volume of emissions each year, this is likely to be a very tedious process, particularly for LDCs and developing countries. As the CBAM progresses, more and more sectors will be added within its scope and this will only complicate the trading process with the EU.

There is a lot India can do to adapt to the CBAM. The government should motivate and incentivize Indian businesses to adopt practices that reduce the carbon footprint, and should introduce more aggressive sustainability driven policies to reduce carbon emissions in India. While these practices can benefit the India-EU trade relations, the added benefit will be a cleaner and more sustainable India. Lastly, the EU should also provide support to countries to help familiarise and adjust them to the policy.

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