

Understanding the United Kingdom’s Carbon Border Adjustment Mechanism (UK CBAM): Is it the European Union CBAM?

OVERVIEW

After initial consultation in March 2023, the United Kingdom in December 2023 announced that it will introduce a Carbon Border Adjustment Mechanism (UK CBAM), to come into effect in January 2027.

This mechanism is supposed to prevent carbon leakage* amid the introduction of border carbon adjustments (BCAs). The EU is the first to introduce a BCA, and in October 2023 the first phase of the EU CBAM came into effect – putting a lot of pressure on other jurisdictions to fast-track the introduction of their BCAs. In March 2024, the UK announced consultations for the introduction of the UK CBAM, which will run for 12 weeks from **21 March to 13 June 2024**. Consultations can be made online by completing six pages of a survey ([found here](#)), commenting on the content of Chapters 5–7 of the [UK CBAM consultation text](#), or can be submitted by email to cbampolicyteam@hmrc.gov.uk. Chapters 5–7 cover product coverage of the UK CBAM, including the issues of adding precursors, methods of calculating the CBAM charge, and the governance and administration components of UK CBAM.

**Carbon leakage is the movement of production and associated emissions from one country to another due to different levels of decarbonisation effort through carbon pricing and climate regulation (HM Revenue & Customs and HM Treasury, 2024).*

INTRODUCTION

The initial iteration of the UK CBAM mirrors the EU CBAM, with less electricity plus ceramic and glass to its sector coverage. The EU CBAM covers iron and steel, aluminium, hydrogen, electricity, cement and fertilisers, including selected precursors and downstream products. The UK CBAM uses different terminologies, but the concept of the mechanism is similar to the EU CBAM, with different proposed carbon pricing and accounting of greenhouse gas (GHG) emissions methodologies, i.e., the proposed calculation method is different from the EU CBAM. The UK CBAM is a charge on emissions embodied in relevant exports payable at the end of an accounting period. This in simple terms is a carbon tax paid on high emitting exports to the UK, similar to the EU CBAM.

The EU CBAM has a transition period, which already started in October 2023, ending in December 2025, before the EU CBAM begins its implementation in January 2026 (i.e., paying of the CBAM charge/tax). The UK CBAM is set to have a one-year accounting period (which can be

interpreted as a transition period) starting from January 2027 to December 2027 to allow firms exporting to the UK to enact appropriate infrastructure to monitor, report and verify GHG emissions embedded in the UK CBAM covered goods. The governance of the UK CBAM will be centered around two institutions in the UK, HM Revenue & Customs (HMRC) and HM Treasury. This is different to the EU CBAM, where the governance and administration of the mechanism is only at one institution, the European Commission.

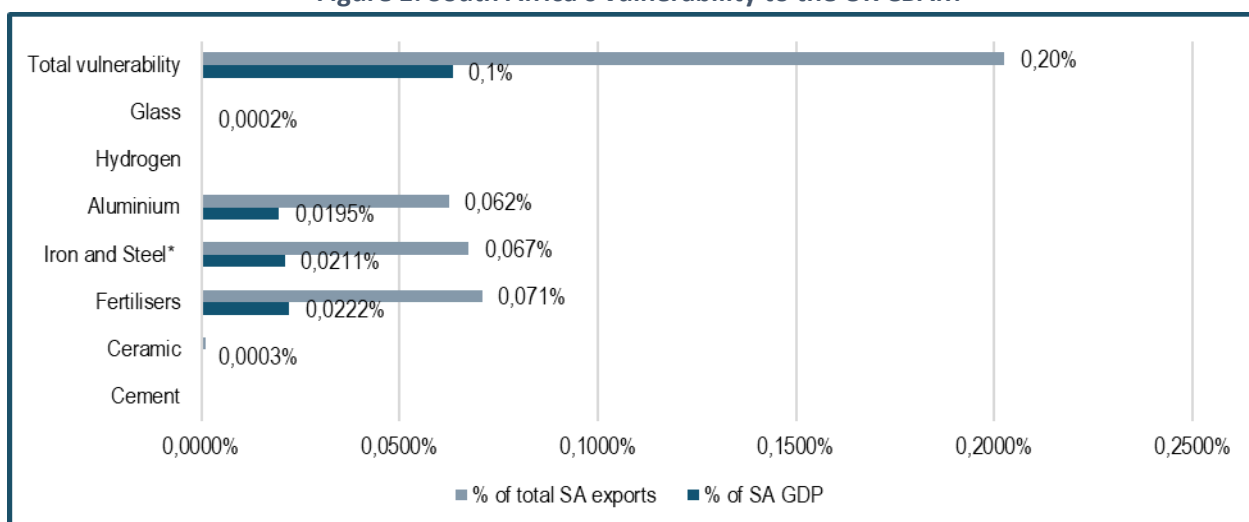
Despite these minor differences, the UK CBAM still mirrors the issues faced under the EU CBAM, except that the UK CBAM has a longer time for consultation on the need to introduce the mechanism. This longer time can be an opportunity for firms exporting to the UK to enact and elaborate on the issues they face to inform the policy development process of the UK CBAM. This policy brief’s main intention is to create awareness for the affected stakeholders of the UK CBAM. The brief also touches on the issues faced by firms under the EU CBAM, and shows the similarities of the two mechanisms.

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info@tips.org.za
+27 12 433 9340
www.tips.org.za

Policy Brief by
Seutame Maimele
TIPS Economist

Figure 1: South Africa's vulnerability to the UK CBAM



Source: Author's analysis based on Trade Map, 2024.

IMPACT OF THE UK CBAM IN SOUTH AFRICA

Based on the list of goods covered under the UK CBAM, a total of US\$223 million (About R4.3 billion) of South African exports (based on 2023 data) is at risk in the short term. This is about 4.2% of all South African exports to the UK, and about 0.2% of total South Africa exports to the world, and just 0.1% of total South African gross domestic product (GDP). This impact is substantially smaller compared to the impact of the EU CBAM. Fertilisers, iron and steel as well as aluminium are primary goods in jeopardy.

Based on the finalised list of goods covered under the EU CBAM, a total of US\$2.4 billion (about R45.4 billion) of South African exports (based on 2023 data) is at risk in the short term. This is about 11.3% of all South African exports to the EU, and about 2.2% of total South Africa exports to the world, and 0.7% of total South African GDP. While the impact of the UK CBAM is small, this adds to the impact of border

carbon adjustments and increases the need for firms and the South African government to start acting on the introduction of these BCAs.

UNDERSTANDING THE CRITICAL COMPONENTS OF THE UK CBAM

In this section, the policy brief touches on key issues/ components that are considered critical for firms and policymaker's attention. These components are related to the content of Chapters 5–7 of the UK CBAM consultation text. These components are non-exhaustive, but they strive to provide guidance for firms/policymakers considering making inputs to the UK CBAM consultations.

Reporting and important dates

An accounting period will be from the beginning of every year to end of the year, i.e. From 1 January to 31 December. Reporting and paying CBAM charges will be done quarterly, the same as the EU CBAM. Figure 1 and Figure 2 detail proposed important dates for reporting under the UK CBAM.

Figure 1: Timetable for returns and payments (First accounting period)

DATE	ACTIVITY
1 January 2027	UK CBAM commences and eligible emission will be subjected to CBAM.
31 December 2027	End of the first reporting period (Accounting period).
30 May 2028	Deadline for submitting the first UK CBAM return and payments covering the first reporting.

Figure 2: Timetable for returns and payments (From 2028)

ACCOUNTING PERIOD END	R
31 March each year	30 April each year. However, in 2028 HMRC proposes to extend this deadline to 30 June 2028 to ensure it does not coincide with the deadline for the first return.
30 June each year	31 July each year.
30 September each year	31 October each year.
31 December each year	31 January each year.

Source Figure 1 and Figure 2: HM Revenue & Customs and HM Treasury, 2024.

The timelines for reporting and paying the UK CBAM are similar to the EU CBAM. The reporting timelines add to the constraints and issues of the local affected industries. While the UK CBAM allows for consultation, firms could advocate for more time for transition and the starting of payment to be postponed.

South African firms, however, are not yet ready to comply with the EU CBAM, both during and after the transition period (Maimele, 2024). The introduction of the UK CBAM adds complexity to the issues, along with a one-year extension from the EU CBAM. South African firms need more time to prepare viable infrastructure – best available infrastructure to comply with the UK CBAM as well as the EU CBAM.

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Administration

Importers will be the liable persons of the tax. This will likely be transferred to the exporters (as in the EU CBAM). The UK CBAM will require CBAM returns (similar to CBAM reports) to be submitted by the importers (liable persons). The EU requires CBAM certificates to be submitted by import declarants (different terminology, but same concept). If a compatible carbon price has been paid domestically, nil returns will be submitted – providing that the liable person should not pay the UK CBAM charge.

The liable persons for the UK CBAM charge (importers), or tax agents, can submit the UK CBAM returns. If the annual UK CBAM covered goods exported to the UK exceed £10 000 (about R230 000), a firm exporting to the UK does not need to register or account for the UK CBAM. This takes into account small, medium and micro enterprises (SMMEs), which the EU CBAM does not. However, the value is extremely low, and an increase of the cap should be considered, especially for developing countries.

Calculating the UK CBAM liability (CBAM charge)

The calculation of the rate to be paid in the UK on CBAM covered goods is different from the EU CBAM. The EU CBAM charge will be based on the weekly average prices from the European Union's Emissions

foresees developing seven CBAM rates for each sector. This will be determined by the UK government. These will be calculated at the beginning of each quarter for each sector, from 2027. The main aim of this is to level the playing field, by making sure that each exporting sector pays an aligned carbon price to the UK domestic sectors.

The UK CBAM liability/charge will be calculated by multiplying the total emissions by the UK CBAM rate minus the carbon price paid domestically – i.e., $CO_2 \times (CBAM \text{ Rate} - \text{Domestic Carbon Price})$. In calculating a CBAM charge, it is noted in the proposed formula that direct and indirect emissions for each sector will be calculated (inclusion of indirect emissions will be an issue for South African firms). This calculation method is simplified, compared to the EU CBAM.

However, a methodology to make these calculations is not available. Based on the UK CBAM consultation text, only explicit carbon pricing will be taken into account. This includes an ETS with a market-based price or a fixed carbon price through a carbon tax for carbon tax discount. These will need to be verified by third party verifiers, when conducting their verifications.

Accounting methodologies

The UK CBAM consultation text presents only two methods for accounting emissions – the use of default values and using actual emissions embodied in CBAM goods (as reported by exporting firms/installations). But it does not provide a methodological guide on how this will be done.

Default values will be used from the initial period of 2027-2030. These are yet to be determined by the UK Government using existing research, such as the published EU CBAM defaults (European Commission, 2023). The UK CBAM will account for both direct and indirect emissions. Direct emissions include emissions from the production process, and indirect emissions include emissions from the consumption of electricity.

Precursors

The inclusion of precursors (input materials, such as iron ore) under border carbon adjustments have gained traction, especially when the EU CBAM was still in development. A similar trend is noticed under

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South Africa is not ready to positively respond to these border carbon adjustments in the short term. Transitioning in less than three years to implement both the EU and UK CBAMs is not enough for industries to install systems to start reporting accurate GHG emissions.

the UK CBAM – based on the UK CBAM consultation text, precursors will still be included, however, already the precursors for iron and steel for example have already been included, i.e., iron ore. But it is important to determine precursors for ceramic and glass before the UK CBAM is legislated as these sectors are newly added.

Verification

Third party verification is necessary for firms exporting to the UK, same as with the EU CBAM. However, the UK CBAM consultation text explicitly highlights that third party verifiers will need to be accredited by accreditation services, which are part of the International Accreditation Forum, such as the United Kingdom Accreditation Service. Verifiers will also need to do physical inspections as part of the verification process. This is not reflected explicitly in the EU CBAM. Verification adds to the operational costs of firms. Firms could highlight how this is an issue for them, and possibly advocate for non accreditation verification processes.

Penalties

If found non-compliant, the UK will use the VAT penalty system in place in the UK as well as the penalty system from the UK ETS to determine a penalty for liable persons. This has not been explicitly stated, as is the case in the EU CBAM. But the UK CBAM penalty charge can be extrapolated for example from the VAT system. The VAT system highlights that if you are late, you will pay a fixed penalty of 2% of the outstanding amount if a payment is between 16 and 30 days late. If a payment is 31 days late or more you will pay a fixed penalty of 4% of the outstanding amount (Moore Kingston Smith, 2023). A fixed penalty per tonne of unreported or inaccurate reporting should be explicitly stated, to make things easier for exporting firms. Also, penalties should start after the transition/preparatory phases of the mechanism – to allow easy adoption of the mechanisms.

CONCLUSION

Generally, the impact of the UK CBAM on the South African economy will be substantially less compared to the EU CBAM. However, the impact adds to the

broader border carbon adjustments. The UK CBAM mirrors the objective of the EU CBAM, using different but similar concepts and methodologies, i.e., calculation of carbon price is different, and accounting of GHG methodologies under the UK CBAM are limited as compared to the EU CBAM.

The opportunities and challenges presented under the EU CBAM are similar to the UK CBAM, as reflected in two reports done by TIPS: *Responding to the European Union's Carbon Border Adjustment Mechanism (CBAM): South Africa's vulnerability and responses* (Maimele, 2023); and the forthcoming *South Africa's Iron, Steel and Aluminium Industries' Readiness to Respond to the European Union's Carbon Border Adjustment Mechanism (CBAM)* (Maimele, 2024).

Emanating from the TIPS research, South Africa is not ready to positively respond to these border carbon adjustments in the short term. This is the result of numerous issues faced by affected industries. Locally, industries are struggling due to logistical and energy issues (collapse of Transnet infrastructure and loadshedding from the power utility Eskom). Linked to the BCAs and short timelines for the transition, transitioning in less than three years to implement both the EU and UK CBAMs is not enough for industries to install systems to start reporting accurate GHG emissions.

Lack of awareness in decarbonisation and climate change measures across the South African government and industries add to the under-preparedness to comply to the border carbon adjustments in the short term. This includes lack of awareness on border carbon adjustments, such as the UK and EU CBAMs, increasing costs of accessing global markets (amid greening global value chains), and the rise of carbon clubs as a form of protecting industries in the Global North.

In the longer term, issues such as the slow decarbonisation of high emitting value chains, weak climate change policies, low domestic carbon pricing by global standards, and high dependence of coal of the South African electricity system will add to the pain of industries in South Africa to comply with these border carbon adjustments, as the EU CBAM has already

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SOME CLARIFICATION QUESTIONS FOR THE UK GOVERNMENT

1. Will the UK CBAM account for a) the development status of each country and b) their level of climate responsibility?
2. In reference to the formulas in Chapter 5 of the UK CBAM consultation text, will defaults values be used in the absence of the methodology that still need to be developed?
3. Is there a methodology guide for accounting and monitoring actual embodied emissions? Also, in terms of installations/exporting firms requiring to have Monitoring, Reporting and Validation systems in place, will the UK government support firms in developing/least developed countries to set up these?
4. Considering the accounting of emissions, and the UK CBAM text having only a guide on direct emissions, will indirect emissions be accounted when determining the CBAM liability (CBAM Charge)? And what methodology or calculations will be used?

entered its transition period, and the mechanism is fully legislated. South African firms did not get enough time to input into the development of the EU CBAM. The UK CBAM, however, provides an opportunity to contribute to the development of the UK CBAM. South African firms to be affected by UK CBAM covered products need to input to the legislative process of introducing the UK CBAM. They can do this via online by completing six pages of survey or email their general responses to the UK Government as highlighted in the overview of this policy brief.

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