# Implications of the European Union's carbon border adjustment mechanism

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The European Union (EU) intends to implement a new regulation known as the Carbon Border Adjustment Mechanism (CBAM), as part of its Fit for 55 package that aims to reduce greenhouse gas emissions by at least 55% by 2030 compared to 1990 levels. The Council of the EU and the European Parliament reached an agreement in December 2022 on implementing CBAM and adopted the regulation in April 2023.

The CBAM is a carbon leakage[1] instrument that functions in tandem with the EU Emissions Trading System (EU ETS), that requires EU importers to purchase CBAM certificates equivalent to the weekly EU carbon price. Under the ETS, the European Commission currently provides free allowances to industries with high risk of carbon leakage but intends to start reducing the number of free allowances to push them to decarbonise. The CBAM will therefore mitigate the risk of carbon leakage by equalising the price of carbon between imported and domestic products in the covered sectors. This aims to encourage countries outside of the EU to increase climate action and ensure that emissions-intensive industries are not relocating from the EU to non-EU countries that have less ambitious climate policies.

The initial phase of the CBAM will cover emissions-intensive sectors with high risk of carbon leakage before expanding the coverage to more sectors in the future. The first phase will cover imports from the following sectors and will be operational from 2026 till 2034:

1) Iron and steel;
2) Cement;
3) Fertilisers;
4) Aluminium;
5) Hydrogen; and
6) Electricity

The European Commission estimates that the CBAM will reduce carbon leakage by 29% by 2030, and support emissions reduction in the covered sectors by 1% in the EU and 0.4% in other countries in the same time period.

## Implications on Asian markets

According to the European Commission, the EU is ASEAN's third-largest trading partner after the China and the United States. The main imports from ASEAN to the EU include machinery and transport equipment, agriculture products, as well as textiles and clothing. Trade relations between the two

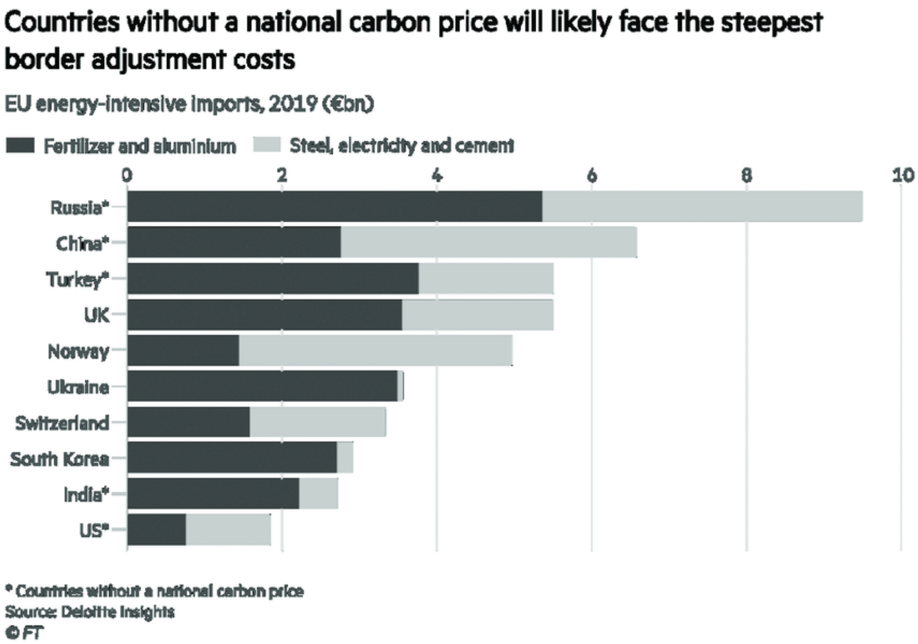
[1] According to the European Commission, carbon leakage refers to businesses moving their production from a country with stringent policies, to a country with laxer policies and emission constraints.

regional blocs are on an upward trajectory, with imports from ASEAN to the EU rising from €136.5 billion in 2021 to €179.8 billion in 2022. Despite significant trade activities between the ASEAN and the EU, the CBAM implementation is expected to have minimal impact on ASEAN as a whole due to the low value of exports in the sectors covered under the CBAM. Only Malaysia and Indonesia would be impacted due to considerable exports of iron, steel and aluminium to the EU, although the overall impact is likely to be minimal.

Among major trade partners, countries that are likely to have concerns over increased tariffs from the CBAM are Russia, China and Turkey as they have the highest exports to the EU in major sectors covered by the CBAM (*Figure 1*). As the countries likely to be significantly affected by the CBAM also do not have a national carbon tax in place, the CBAM developments may spur authorities to look into carbon tax policies. China's ETS has been operational since 2021, but it has faced challenges such as low trading volumes, data quality and MRV (Monitoring, Reporting and Verification) issues.

Iron, steel and aluminium comprise the majority of China's exports to the EU. While China's exports to the EU amounted to €6.5 billion in 2019, it represents less than 2% of China's overall exports to the EU and is still relatively small at present. Although the immediate impact may seem small, the impact on China may become more significant in the long run if the scope of products under the CBAM expands.

**Figure 1: Top countries likely to be most affected by the CBAM in terms of energy-intensive exports to the EU**




Source: Deloitte Insights, European Energy and Environmental Law Review

### Anticipated trends moving forward

Increased tariffs resulting from the CBAM may drive policies towards improving energy efficiency, developing a national carbon tax and implementing emissions-reduction measures for EU's trade partners that may be impacted in the long term. This could promote the shift towards greener production processes in CBAM-covered sectors and accelerate decarbonisation among key trade partners.

Amid concerns over the long-term impact of the CBAM, China may improve the China ETS by accelerating the timeline to incorporate other CBAM-covered sectors such as aluminium, cement and steel sectors into the ETS. The existing China ETS coverage is limited to the power sector and accounts for over 40% of China's greenhouse gas emissions.

The CBAM also presents opportunities to speed up the growth of green industries, transform brown sectors to be greener, and accelerate investments in low-carbon technologies. For example, there are efforts underway to shift steel production from coal-fired furnaces to those powered by electricity or hydrogen to produce green steel[2]. Green steel has the potential to decarbonise the emissions-intensive steel manufacturing sector that currently comprises 8% of global greenhouse emissions. Scaling up green steel production would require greater investments in low-carbon hydrogen production and renewable power generation.

### Conclusion

The CBAM is an important tool for greater global cooperation on trade and climate, as it will encourage countries outside of the EU to implement more stringent standards in export-intensive industries and prevent carbon leakage. It is an opportunity for countries to speed up the alignment of their exports with the green movement, thereby improving competitiveness in the global market towards a low-carbon future.

There should be in-depth engagement with affected countries, especially if the CBAM coverage is expanded and may affect more developing countries. Additional CBAM-related costs for developing countries can be challenging for economic growth, which underscores the importance for a just transition and to step up financial aid for developing countries to combat climate change.

Sources: European Parliament, European Commission, China Briefing, Konrad-Adenauer-Stiftung e.V., European Energy and Environmental Law Review, ISEAS-Yusof Ishak Institute, Deloitte, China Briefing, World Economic Forum

[2] According to the World Economic Forum, green steel refers to steel produced without the use of fossil fuels.

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