



EUROPE AND
CENTRAL ASIA

KAZAKHSTAN

World Bank Group

COUNTRY CLIMATE AND DEVELOPMENT REPORT

BACKGROUND NOTE 1

EU CBAM: Modelling the Impacts on Kazakhstan's Economy

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EU CBAM: Modelling the Impacts on Kazakhstan's Economy

The EU Carbon Border Adjustment Mechanism (CBAM) will improve the competitiveness of producers that can demonstrate low emissions intensity

The EU plans to introduce a CBAM to prevent carbon leakage and support the mitigation ambitions of the EU and of other countries.¹ Under the current proposal, the CBAM will be linked to the EU Emissions Trading System (EU ETS), requiring importers to purchase certificates to cover emissions embodied in imported goods. The CBAM price will mirror the EU ETS permit price but will be reduced for products subject to carbon pricing in their country of origin. This provides an opportunity for countries to implement domestic carbon pricing, effectively reclaiming government revenues that would otherwise be payable to the EU. The CBAM price will also be adjusted to take into account any free allocation of EU ETS permits that EU industry receives in sectors subject to CBAM.

Embodied emissions will be determined based on the carbon intensity of production in exporting countries or, where robust emissions measurement, reporting and verification (MRV) is not in place, a default value equivalent to the worst-performing 10 per cent of EU installations. This means producers in countries that can demonstrate relatively low emissions intensity of production will face lower CBAM costs, while those without MRV systems will pay the higher default rate.

Under the current proposal the CBAM will come into full force in 2026, with a transitional phase from 2023-2025 during which importers will report the embedded emissions in covered products. It will cover Scope 1 (direct) emissions from certain products in the Iron and Steel, Cement, Fertilizers, Electricity and Aluminum sectors. The European Commission has signaled that it will likely expand sectoral coverage of the CBAM to other emissions-intensive, trade exposed (EITE) products such as glass, chemicals, petroleum and other fossil fuels, and perhaps other metals, and Scope 2 (electricity use).

The CBAM would act like an increase in tariffs imposed by the EU, with tariffs based on products' emissions intensities. The impact on each country will ultimately depend on many factors, including the elasticity of demand, the level of cost pass-through to consumers, each country's emissions intensity and emission reduction opportunities relative to that of competitors, opportunities to divert exports to other countries, and the ability for exporting countries to robustly measure and report emissions.

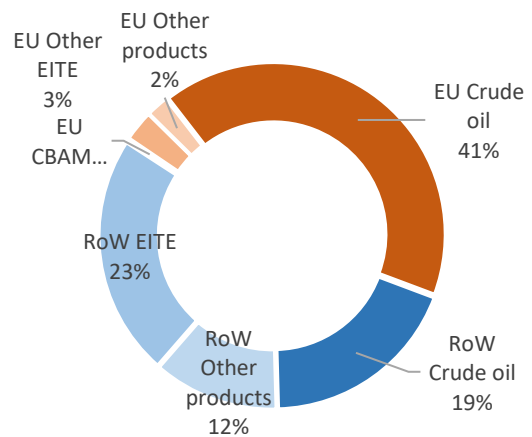
¹ [Carbon Border Adjustment Mechanism \(europa.eu\)](https://data.consilium.europa.eu/doc/document/ST-7226-2022-INIT/en/pdf)

<https://data.consilium.europa.eu/doc/document/ST-7226-2022-INIT/en/pdf> - EU agreement March 2022. Scop is in Annex I, page 78.

As Kazakhstan's largest trading partner, the EU's CBAM could have large implications.

Around 45 per cent of Kazakhstan's total goods exports by value go to the EU, meaning EU policies can have substantial flow-through effects (Figure 1). The vast majority is crude oil. Crude oil is not likely to be covered by the CBAM in the near-term, but oil exports to non-EU countries (representing 19 per cent of exports) could be impacted indirectly, as producers move away from emissions-intensive energy sources to reduce their own CBAM exposure. Under the narrow scope of the current proposal less than half a per cent of Kazakhstan's exports would be covered. However if these products are included under an expanded CBAM, as foreshadowed by the EU, over 3 per cent of Kazakhstan's exports could be covered. A further 23 per cent of Kazakhstan's exports are EITEs going to non-EU destinations, some of which are considering policies similar to the CBAM.

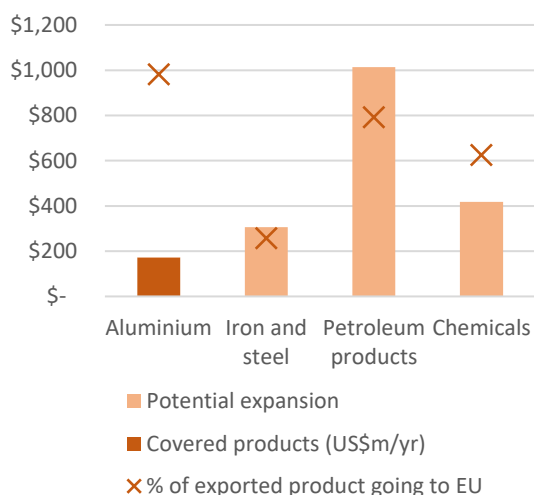
Figure 1 Kazakhstan's goods exports by value, 2018-2019 average



Aluminum production accounts for nearly all of Kazakhstan's covered exports to the EU, and is highly exposed to CBAM impacts, with nearly 30 per cent of exports going to the EU. These exports are worth nearly US\$200 million a year. The emissions intensity of Kazakhstan's production of non-ferrous metals (including aluminum), at 615 tCO₂e/Million USD, is much higher than other major exporters: the EU 122 tCO₂e/Million USD and China at 489 tCO₂e/Million USD.² Kazakhstan does not export much, if at all, from other covered sectors, like mineral products, fertilizers and electricity, to the EU. If the CBAM is expanded, petroleum products, in which 25 per cent of annual exports, worth over US\$1 billion, go to the EU, would be exposed. Chemicals and iron and steel products are also at risk; although some products from these sectors are included in the current proposal, the specific products Kazakhstan exports to the EU (like ferro-alloys) are exempt, but they could be covered later.

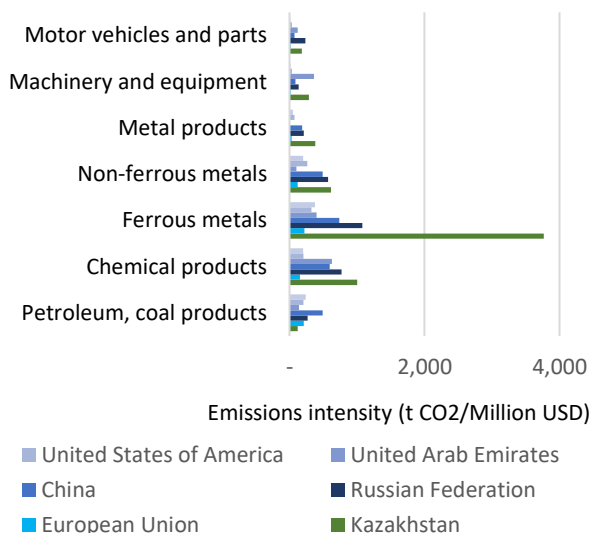
² Figures derived from GTAP data. Due to the high level of sector aggregation, comparisons between countries mask differences in sectors between countries. For example, glass and cement are both 'mineral products'. If one country's production is mostly energy-intensive cement, their emissions intensity (expressed per Million USD of output) may seem higher than a country whose focus is on glass, and these countries may not be competitors. This metric does however provide a useful guide to the cost of a carbon price relative to production value. GTAP data does not include all emissions (for example CO₂ emissions from industrial processes).

Figure 2. Value of exports to EU and EU share of global exports, annual average 2018-2020



Source: UNCOMTRADE (from WITS)

Figure 3. Emissions intensity (scope 1 and 2) for Kazakhstan and select competitors



Source: Derived from GTAP data

The World Bank has done modelling to quantify CBAM’s economic impact

To quantify the potential impact of the CBAM on Kazakhstan’s economy and that of other countries in Europe and Central Asia (ECA) the World Bank has undertaken macroeconomic modelling. The modelling explores the impact on the economy overall, as well as on individual sectors. It also investigates what might happen under different CBAM coverage and if the US adopted a similar mechanism. Further detail of the modelling and scenarios is at Appendix A. The scenarios modelled and discussed in this paper are outlined in **Table 1. Modelled scenarios**. This modelling uses estimated country-specific emissions intensities. However, importers will only be able to use their actual emissions intensity if there is robust MRV of emissions in place. If producers in Kazakhstan are not able to provide robust emissions intensity numbers their products may be subject to a higher CBAM cost (reflecting the EU default value) than is modelled here.

Table 1. Modelled scenarios

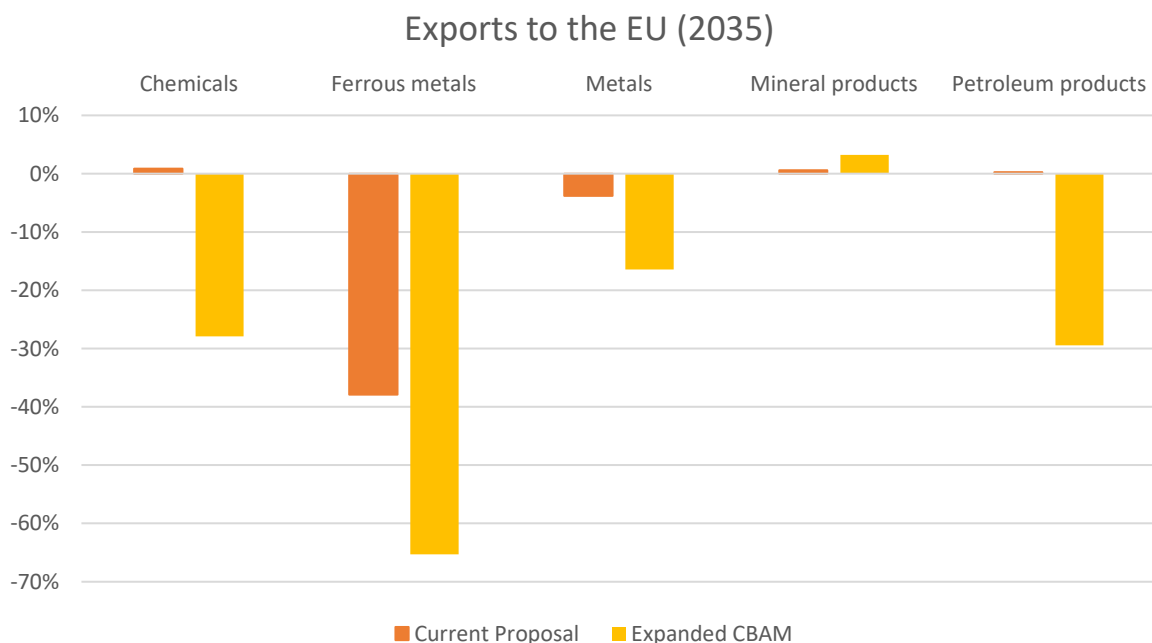
Short name	Description
‘Baseline’	Non-EU/EUFTA countries in Europe and Central Asia (ECA countries) take no further action beyond current measures, so may not meet NDCs. All non-ECA countries reduce emissions in line with NDCs. No CBAM is introduced.
‘Current proposal’	As under ‘Baseline’, but CBAM introduced in EU & EFTA, with obligation to buy permits from 2026, covering scope 1 emissions for certain products in Iron and steel, Aluminum, cement, fertilizers and electricity in line with the current proposal. Countries’ domestic carbon prices credited towards CBAM charges. Free allocation is accounted for in the CBAM price applied.
‘Expanded CBAM’	As under ‘Current proposal’, with coverage extended to all chemicals, all non-ferrous metals, petroleum and coal production (embedded emissions during

processing, not on the carbon content of fuels), extraction of asphalt bitumen and iron ore, and glass. Scope 1 and 2 emissions are included.

US	As under 'Expanded CBAM', but with the US also imposing a CBAM on the same emissions scope, from 2026. No free allocation is included for the US CBAM.
All ETS, US	CBAM applied to Scope 1 and 2 emissions for all products in all ETS sectors by both the EU & EUFTA and the US.

Modelling has found the CBAM will hit some industries particularly hard, so targeted support may be needed to transition these sectors to lower-emissions production, different products or alternative markets. Kazakhstan's exports to the EU of covered products could be impacted by nearly US\$1.8 billion if the CBAM is expanded, compared with a baseline with no CBAM. The impact is much greater for some sectors than others (Figure 9). Under the 'Current proposal', exports of iron and steel ('ferrous metals') could be 38% lower by 2035³, and more than 65 per cent lower, a loss of nearly \$650 million in value, under an 'Expanded CBAM'. Under the current proposal exports to the EU of Non-ferrous metals could be 4 per cent lower, representing a loss of nearly \$60 million.⁴ This impact is much higher – 16 per cent and over \$250 million – under an 'Expanded CBAM'. Petroleum products and chemicals also face declines of nearly 30 per cent where they are covered ('Expanded CBAM').

Figure 4 Modelled exports to the EU in 2035, CBAM sectors, deviation from 'Baseline'



Some exports in negatively impacted sectors have the potential to be diverted to other destinations, if market access and logistics can be arranged (Table 2). Under the current proposal most of the value of lost exports of non-ferrous metals to the EU can theoretically be diverted elsewhere, leaving the sector facing a \$22 million loss in 2035. Under a broader CBAM, ferrous metals, non-ferrous metals and chemicals can divert some of their exports. Exports of petroleum and coal products to non-EU

³ There is discussion of excluding ferro-alloys from CBAM which will reduce the impact of CBAM on Kazakhstan's ferrous metals sector as ferro-alloys make up most of Kazakhstan's ferrous metals exports to the EU

⁴ Aluminum is the only non-ferrous metal covered in the 'Current proposal' scenario

destinations are likely to fall, leading to an even larger overall impact on this sector. The combined export losses for CBAM products still reach nearly \$1.4 billion.

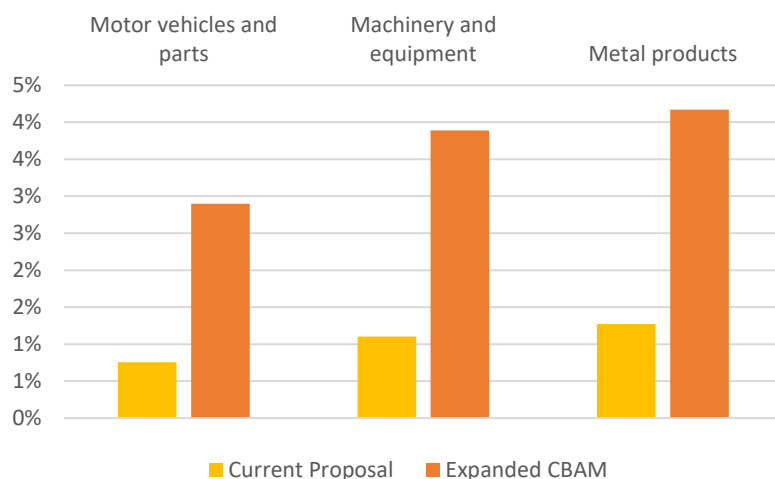
Table 2 Modelled real exports by destination and sector, 2035, deviation from 'Baseline'

Scenario: Export destination:	Current proposal						Expanded CBAM					
	EU		Non-EU		Global		EU		Non-EU		Global	
	%	\$ m	%	\$ m	%	\$ m	%	\$ m	%	\$ m	%	\$ m
Ferrous metals	37.8%	-375	0.3%	31.5	3.2%	-343	-65.2%	-646.4	1.2%	119.5	-4.9%	-526.9
Non-ferrous metals	-3.8%	-59.7	0.4%	37.4	-0.2%	-22.3	-16.4%	-256.9	1.4%	145.7	-0.9%	-111.2
Petroleum and coal products	0.2%	3.8	0.1%	5.5	0.2%	9.3	-29.4%	-453.0	-0.1%	-3.0	-8.0%	-456.0
Mineral products	0.6%	0.1	0.2%	0.7	0.2%	0.8	3.2%	0.7	0.3%	1.2	0.4%	1.8
Chemicals	0.9%	13.7	0.6%	66.2	0.6%	79.9	-27.9%	-431.5	1.7%	208.1	-1.7%	-223.5
Machinery and equipment	1.1%	0.2	0.5%	8.5	0.5%	8.7	3.9%	0.7	0.9%	15.0	1.0%	15.7
Metal products	1.3%	0.1	0.5%	1.4	0.6%	1.6	4.2%	0.4	1.2%	3.1	1.3%	3.5
Motor vehicles and parts	0.8%	0.2	0.5%	2.1	0.5%	2.4	2.9%	0.9	1.2%	5.8	1.3%	6.7
Oil	0.3%	151.0	0.3%	108.8	0.3%	259.8	3.2%	1485.5	-0.3%	-108.7	1.7%	1376.9
Gas	0.8%	2.6	-0.8%	-111.1	-0.8%	-108.5	2.7%	9.3	-3.0%	-398.6	-2.8%	-389.3
CBAM goods	-1.2%	-48.0	0.3%	103.7	0.2%	55.7	-31.3%	-1788.7	1.1%	461.6	-2.8%	-1327.1

The CBAM may create opportunities for downstream sectors like manufacturing which use inputs from CBAM sectors (Figure 5). This is because Kazakhstan's manufacturers would not face CBAM costs on their inputs, while EU producers will. Exports of Metal products and Machinery and equipment to the EU could be 4 per cent higher under an 'Expanded CBAM'. These exports could also become more competitive in other international markets compared with EU products, leading to small increases in exports to non-EU markets (Table 2). Machinery and equipment production represents a potential competitive strength for Kazakhstan, so if this production expertise can be developed these gains could be magnified.⁵

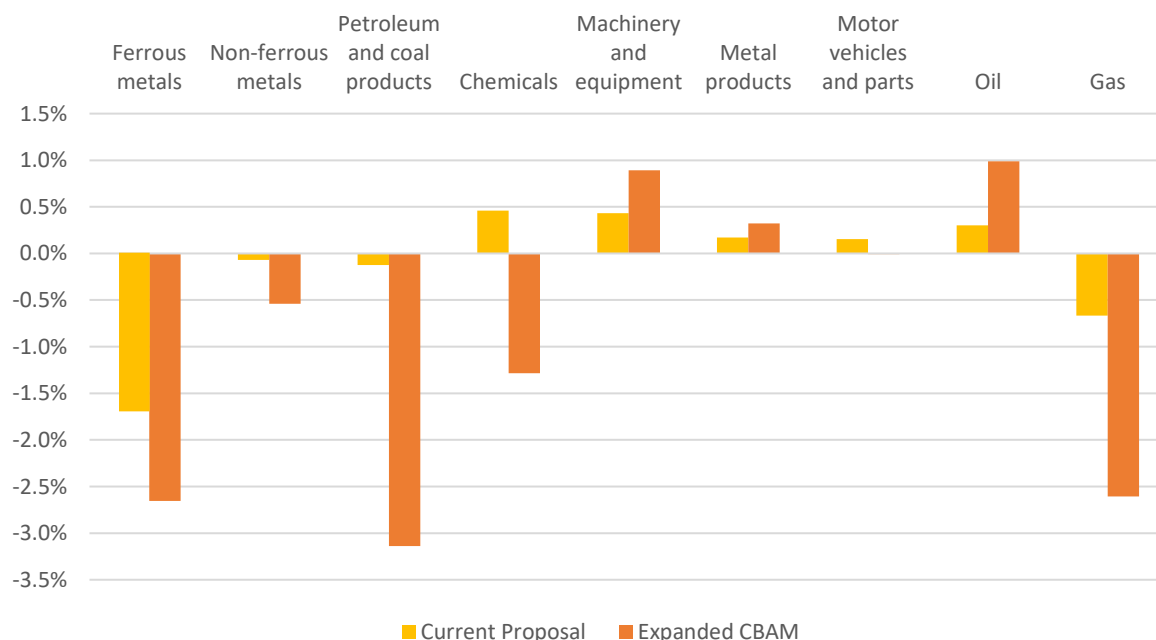
⁵ Kazakhstan CCDR Section [1.4.3] and Supplementary paper on Green Growth Opportunities

Figure 5 Modelled exports to the EU in 2035, downstream sectors, deviation from 'Baseline'



Impacts on exports flow through to output, with ferrous and non-ferrous metals, petroleum and coal products, and chemicals all seeing output decline (Figure 6).

Figure 6 Modelled output, 2035, deviation from 'Baseline'



The CBAM could change the profile of energy exports and domestic demand patterns. Oil and gas exports to the EU could be higher compared with the 'Baseline', particularly under an 'Expanded CBAM'. This reflects higher EU demand, to fuel increased production of goods covered by the CBAM. Under the 'Expanded CBAM', the higher demand for from the EU is met partly with exports diverted from other countries and lower domestic oil use, along with a 1 per cent increase in output. Domestic oil use could be more than 40 per cent lower, driven mostly by the hit to petroleum processing under an 'Expanded CBAM'. Despite higher EU exports gas output overall is lower under an 'Expanded CBAM' (2.6 per cent) or the 'Current proposal' (0.7 per cent), with both domestic consumption and exports to non-EU countries lower. All other types of energy output is also lower – around 1 per cent for 'Expanded CBAM' or around 0.4 per cent for 'Current Proposal'.

Sector-specific impacts have risks for thousands of employees in affected sectors (Table 3). Employment in Ferrous metals could be 2.5 per cent lower under an expanded CBAM – representing a loss of jobs for approximately 1,700 people. Although growth sectors have the potential to expand employment under certain scenarios support may be needed to overcome barriers such as skills needs and location of new roles, to maintain the welfare of these employees, their families and communities.

Table 3 Modelled employment in 2035, deviation from ‘Baseline’⁶

Scenario:	Current proposal		Expanded CBAM	
	Workers	%	Workers	%
Ferrous metals	-1100	-1.60%	-1700	-2.50%
Non-ferrous metals	-100	-0.07%	-500	-0.45%
Petroleum & coal products	<100	-0.12%	-200	-3.09%
Mineral products	<100	0.04%	<100	0.09%
Chemical products	400	0.46%	-1000	-1.19%
Machinery and equipment	100	0.43%	200	0.92%
Metal products	<100	0.17%	100	0.37%
Motor vehicles and parts	<100	0.15%	<100	0.06%
Oil	600	0.30%	2200	1.12%
Gas	-100	-0.67%	-300	-2.43%

The modelling found the CBAM is expected have minimal macroeconomic impact, though this relies on the ability to shift resources to production in growth sectors. Under both the ‘Current proposal’ and ‘Expanded CBAM’ scenarios the impact on Kazakhstan’s GDP in 2035 is expected to be minimal – a less than \$35 million deviation from the ‘Baseline’. Average wages are 0.1% lower, with household consumption barely affected. These outcomes represent the potential for some sectors to increase output and exports, but assumes there are no barriers to the transfer of capital, labour and other resources to different production.

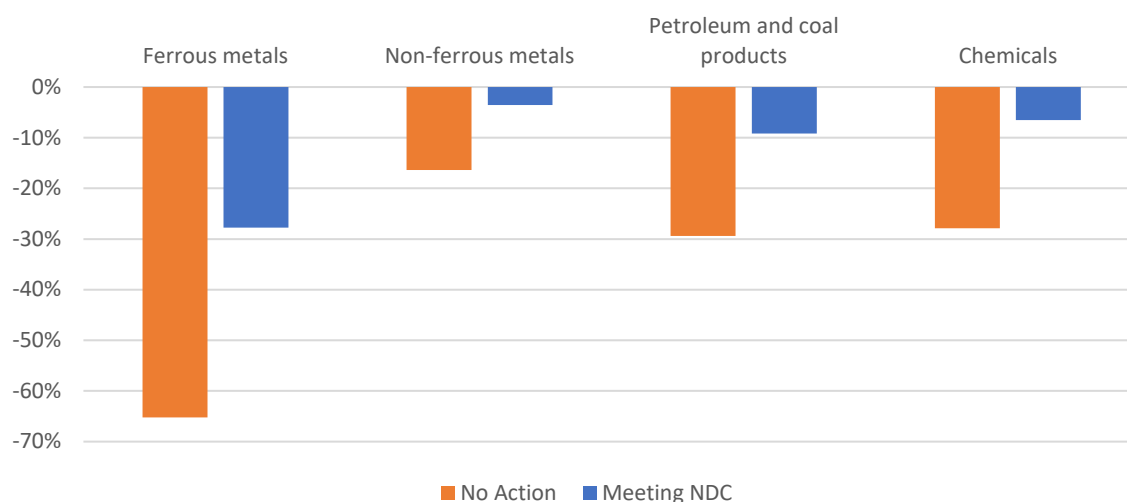
The impact of the CBAM is much less if Kazakhstan meets its NDC

When Kazakhstan acts to reduce its own emissions the emissions intensity of its production and energy use is lower, so its exporters face lower CBAM costs. Using carbon pricing in its policy response, as Kazakhstan plans, further decreases CBAM costs as the EU recognizes the action and reduces the CBAM price applied. This better maintains the competitiveness of its exports in relation to EU and other international producers.

If Kazakhstan takes action to meet its NDC, an expanded CBAM’s impact on exports of iron and steel to the EU would be less than half (Figure 12, ‘Ferrous metals’). The impact on non-ferrous metals goes from 16 per cent drops to just 3.6 per cent. Similarly, impacts on petroleum products and chemicals are several times smaller.

⁶ Given the approximate nature of the calculation of # of workers (derived from the model's \$-denominated results), worker number figures are rounded to the nearest 100

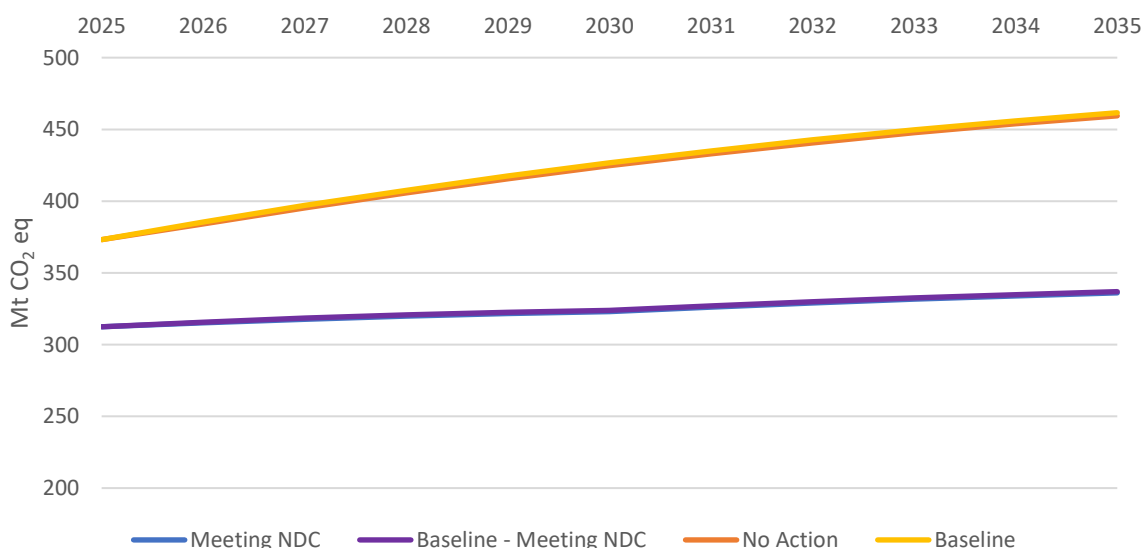
Figure 12. Impact of the CBAM on real exports to the EU, 2035, Expanded CBAM¹



Similarly, the impacts on output in these sectors are lower – 1.27 per cent for ferrous metals when Kazakhstan is meeting its NDC versus 2.65 per cent when it isn’t met. Petroleum and Coal products would face output around \$190 million lower because of the CBAM, compared with an impact of \$500 million under ‘No Action’. The cumulative hit to output from sectors covered by an expanded CBAM would be around \$500 million, compared with nearly \$1.8 billion under the ‘No Action’ scenario. The macroeconomic impacts of the CBAM are again expected to be minimal.

The modelling does not anticipate meaningful reductions in Kazakhstan’s emissions due to the CBAM. In scenarios where Kazakhstan is not meeting its NDC, the CBAM could drive a reduction of up to 0.5 per cent, or 2.2 Mt CO₂ eq, in 2035. Under scenarios where Kazakhstan meets its NDC the CBAM has a negligible impact. However the difference in emissions between these two groups of scenarios is substantial. Without further action to meet Kazakhstan’s NDC the model sees emissions continue to grow each year, reaching around 460 Mt CO₂-eq in 2035. Meeting the NDC could save over 100 Mt CO₂-eq of emissions each year in the 2030s.

Figure 7 Modelled Total emissions per year



Appendix A: Modelling approach

Model and data

The simulation uses the Global CGE (computable general equilibrium) model ENVISAGE (v.10) specifically tailored to analyze climate change mitigation policies. The advantage of this general equilibrium (GE) approach to the analysis of the CBAM effects is that it takes into account wider macroeconomic effects and structural economic adjustments. However, the GE model's focus on macroeconomic and industry effects of the CBAM, does not allow it to take into account heterogeneity of companies and it may neglect the specifics of individual reactions at the entity level. In particular, the CBAM may have different implications for different companies or facilities within the same industry, depending on the carbon intensity of the technology they use. Even when overall exports of an industry decrease because of the CBAM, several producers in that industry may take advantage of lower carbon intensity (relative to the industry average) and increase their exports.

The modelling is based in the Global Trade and Analysis Project (GTAP) 10 Power database. Simulations cover the period 2014-2035, where 2014 is the base year. The Baseline projection for the years 2014-2035 covers all variables of the model, including industry outputs, trade in commodities, relative prices of commodities, aggregate economic categories, energy use, and GHG emissions. The Baseline results are derived based on general assumptions on GDP growth rate, energy efficiency improvement, evolution of renewables share in power generation etc. The modelling uses emissions intensities for each country's outputs derived from GTAP data. This means the modelling will reflect improved competitiveness for countries with less emissions-intensive production versus those that are more emissions intensive. However, under the current EU proposal, importers will only be able to use the actual emissions intensity of a product if there is robust emissions measurement, reporting and verification available for those products. Where this is not possible products will be allocated a default emissions intensity that is equivalent to the worst-performing 10% of EU installations producing the same product. This means that, if producers are not able to provide robust emissions intensity numbers their products may be subject to a higher CBAM cost than is modelled here.

Scenarios

The scenarios used in this Note are described in Table 4.

Table 4. Policy Scenarios

Short name	Description
'Baseline'	Non-EU/EUFTA countries in Europe and Central Asia (ECA countries) take no further action beyond current measures, so may not meet NDCs. All non-ECA countries reduce emissions in line with NDCs. No CBAM is introduced.
'Current proposal'	As under 'Baseline', but CBAM introduced in EU & EFTA, with obligation to buy permits from 2026, covering scope 1 emissions for certain products in Iron and steel, Aluminum, cement, fertilizers and electricity in line with the current proposal. Countries' domestic carbon prices credited towards CBAM charges. Free allocation is accounted for in the CBAM price applied.
'Expanded CBAM', or 'No NDC'	As under 'Current proposal', with coverage extended to all chemicals, all non-ferrous metals, petroleum and coal production (embedded emissions during

processing, not on the carbon content of fuels), extraction of asphalt bitumen and iron ore, and glass. Scope 1 and 2 emissions are included.

US	As under 'Expanded CBAM', but with the US also imposing a CBAM on the same emissions scope, from 2026. No free allocation is included for the US CBAM.
All ETS, US	CBAM applied to Scope 1 and 2 emissions for all products in all ETS sectors by both the EU & EUFTA and the US.
ECA countries take action to meet NDCs	
'Baseline - Meeting NDC'	As under 'Baseline', but ECA countries implement measures to meet their NDCs.
'Current proposal NDC'	As under 'Current proposal', but ECA countries implement measures to meet their NDCs.
'Expanded CBAM NDC', or 'Meeting NDC'	As under "Expanded CBAM" or 'No NDC', but ECA countries implement measures to meet their NDCs.

Assumptions

The 'Baseline' scenario is intended to represent a business-as-usual situation where there is no CBAM, to serve as a counterfactual against which to measure the CBAM's impact. It assumes that countries reduce their emissions in line with their latest Nationally Determined Contributions until 2030 (e.g. EU reaches a 50% reduction). Cost neutral, emission saving technological and preference shifts in all countries is assumed to represent non-carbon price mitigation policies (e.g. expanding renewables, higher efficiency standards, increases in electricity shares for the final and intermediate consumers, and improvements in energy efficiency) but this change is much more ambitious in the EU reflecting the higher ambition level in EU Green Deal. Where these changes are insufficient to meet a country's NDC, a carbon price is determined facilitating further emission reduction to the NDC target. That carbon price invokes substitution of energy for capital (hence, further energy efficiency improvement), substitution of fuels for electricity, substitution of more carbon-intensive fuels for less carbon-intensive fuels, and changes in technology mix in the power generation sector. After 2030, carbon prices are assumed to increase by 1% each year. The NDC targets are introduced to the 'Baseline' as emission intensity per unit of GDP. Free allowances in the EU initially cover 80% of all emissions and are removed gradually until 2035.

The 'Baseline' is constructed based on the macroeconomic and demographic assumptions of the Shared Socioeconomic Pathways (SSP) database and IMF GDP projections until 2026, in particular, the OECD-developed SSP2 scenario which represents the "middle of the road" pathway with intermediate socio-economic challenges for mitigation and adaptation (Riahi et al., 2018). The labor productivity is calibrated to replicate the latest projections of the World Economic Outlook (WEO) (IMF, 2020) until 2026, and then use SSP2 GDP growth assumptions corrected for the difference between SSP2 and WEO projections. Impact of COVID is in the baseline through reduced GDP growth in all regions.

The various CBAM scenarios build on the baseline scenarios, applying different CBAM coverage – both product/sectoral scope, emissions scope and the countries or regions which adopt the policy. The scope of the CBAM under the 'Current proposal' scenario is broadly aligned with the current EU

proposal released on 14 July 2021.⁷ Table 5 provides some further information about the different CBAM sectoral scopes modelled, mapped to GTAP/ENVISAGE Sectors. The current CBAM proposal lists specific products in each sector, and its coverage does not align neatly with the more aggregated GTAP categories. The modelling approach has therefore approximated the proportion of each GTAP category that would be covered by the CBAM for each country, and treated that portion as covered under the ‘current proposal’ and ‘expanded CBAM’ scenarios. Under scenarios with broader CBAM sectoral coverage (eg. ‘All ETS’), all products in relevant sectors are considered covered.

Table 5. CBAM Coverage scenarios with Mapping to GTAP/ENVISAGE Sectors

GTAP/ENVISAGE sector	Current proposal		Expanded CBAM		All ETS	
	Products	Sector coverage ⁸	Products	Sector coverage	Products	Sector coverage
Electricity (ely)	Electricity	All	Electricity	All	Electricity	All
Ferrous metals (i_s) ⁹	Iron and Steel	84-100%	Iron and Steel	84-100%	Iron and Steel	All
Metals nec (nfm)	Aluminum	15-100%	Aluminum, Zinc, Copper, Lead, Gold, Silver	All	Aluminum, Zinc, Copper, Lead, Gold, Silver	All
Non-metallic minerals (nmm)/Minerals nec	Cement	0-26%	Cement and glass	16-58%	All non-metallic mineral products	All
Chemical products (chm)	Fertilizer	Below 1%	Fertilizer and other chemicals	All	Fertilizer and other chemicals	All
Other extraction (oxt) /Other mining	-	-	Asphalt bitumen and iron ore	0-5%	Metal ores; other mined and quarried goods	All
Petroleum, coal product (p_c)	-	-	Coke and refined petroleum products	All	Coke and refined petroleum products	All
Coal (coa)	-	-	-	-	Coal, lignite and peat	All
Oil (oil)	-	-	-	-	Crude oil extraction	All
Gas (gas)	-	-	-	-	Natural gas extraction	All
Gas manufacture, distribution (gdt)/Gas distribution	-	-	-	-	Natural as manufacture, distribution	All
Metal products (fmp)	-	-	-	-	Fabricated metal products excl.	All

⁷ [EUR-Lex - 52021PC0564 - EN - EUR-Lex \(europa.eu\)](https://eur-lex.europa.eu/eli/reg/2023/955/oj)

⁸ The proportion of a GTAP/ENVISAGE sector covered under each scenario is tailored in the model to reflect each country’s exports composition. For example, 84.5% of Georgia’s exports of Ferrous Metals to the EU will be covered by the CBAM under the current proposal, while for Armenia it is 99.9%. The coverage range provided here is intended to give a general sense of the level of coverage for ECA countries and excludes some outliers. For example, less than 30% of Azerbaijan’s Ferrous Metals exports to the EU are modelled to be subject to the CBAM under the ‘Current Proposal’ and ‘Expanded CBAM’ scenarios. Where ‘All’ is indicated 100% of the sector is included for all countries.

⁹ For Kazakhstan, the model included 94.2% of ferrous metals under both the ‘Current proposal’ and ‘Expanded CBAM’. The current proposal however excludes ferro-alloys, which make up over 90% of Kazakhstan’s ferrous metals exports to the UK. As such, the results for impacts on ferrous metals under the current proposal are excluded from the analysis.

					machinery and equipment	
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