



I N S T I T U T E
O F N A T U R A L M O N O P O L I E S
R E S E A R C H

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**«Carbon Border Adjustment Mechanism in
the European Union: how to prevent discrimination of
Russian exporters»**

Executive summary

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The European Union (EU) is pursuing an ambitious climate goal to decarbonize its economy and the European Union Emissions Trading System (EU ETS) is a cornerstone of the EU climate policy. A number of studies show that measures taken in the EU led to a negative effect called carbon leakage which refers to the situation that companies move their carbon-intensive production (together with investments and workplaces) to countries with laxer climate policies due to additional climate-related costs. At the same time the EU's climate ambition continues to increase and the European Green Deal implies additional decarbonization efforts which is expected to bring a higher risk of carbon leakage.

In order to compensate this effect since 2019 the EU is in the process of establishing a carbon border adjustment mechanism (CBAM). The new mechanism aims to price greenhouse gases (GHG) emissions embodied in imports of certain goods. The European Commission plans to present its CBAM proposal on 14 July, 2021.

CBAM is a potentially discriminatory mechanism. It bears significant risks for all EU trading partners. Firstly, its fundamental compliance with international agreements (WTO rules and the UN Framework Convention on Climate Change) seems to be controversial. For example, the introduction of carbon price for all importers regardless of their level of economic development and living standards contradicts the principle of «common but differentiated responsibilities» set out in the Convention.

Secondly, certain CBAM elements can be particularly discriminatory. For example, the most likely option for determining the carbon footprint of goods – benchmarks (universal reference values for GHG emissions per unit of goods applicable to all suppliers). In case benchmarks are used companies with low carbon footprint per unit of goods will pay too much and companies with high carbon footprint per unit of goods will pay too little. Hence, there is a risk of discrimination of some companies compared to European producers who pay for their actual GHG emissions. This approach is discriminatory and doesn't encourage companies and countries to decarbonize. Moreover, in this case CBAM loses its climate focus which the European Commission is likely to use to justify the compliance of the mechanism with WTO rules.

Russia is the most at risk of CBAM introduction due to its sectoral structure of exports. Russia has the most significant volume of exports to the EU deemed to be exposed to CBAM. Probably, CBAM could cover up to \$57 billion of Russia's supplies to the EU (

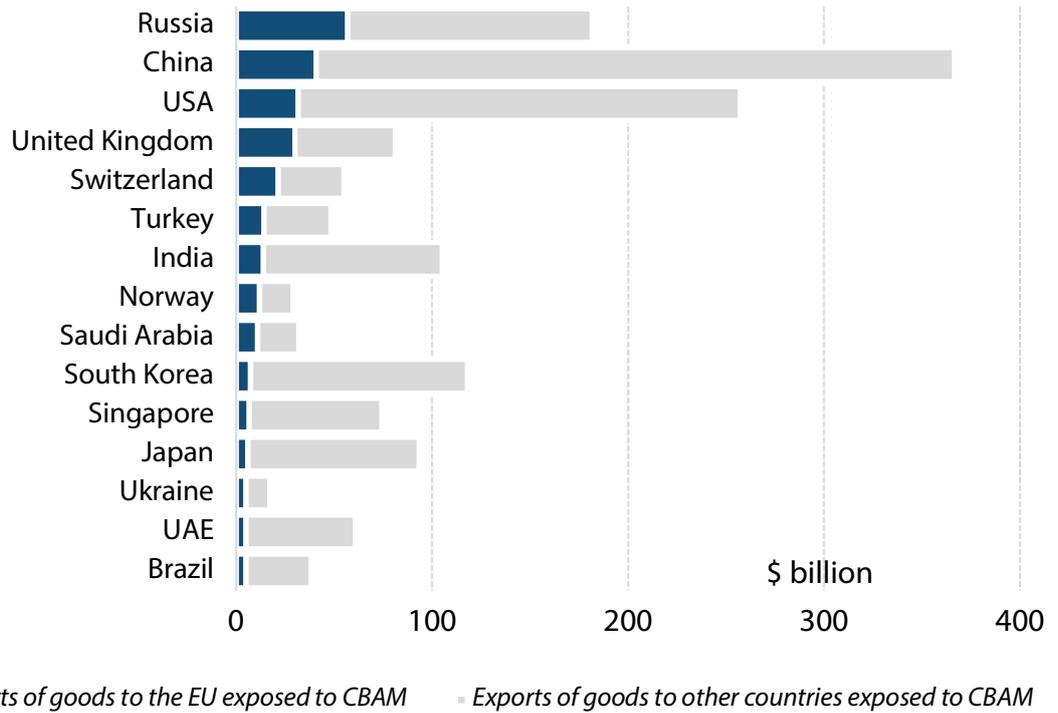


Figure 1) that corresponds to 13% of total volume of country's exports (Figure 2).

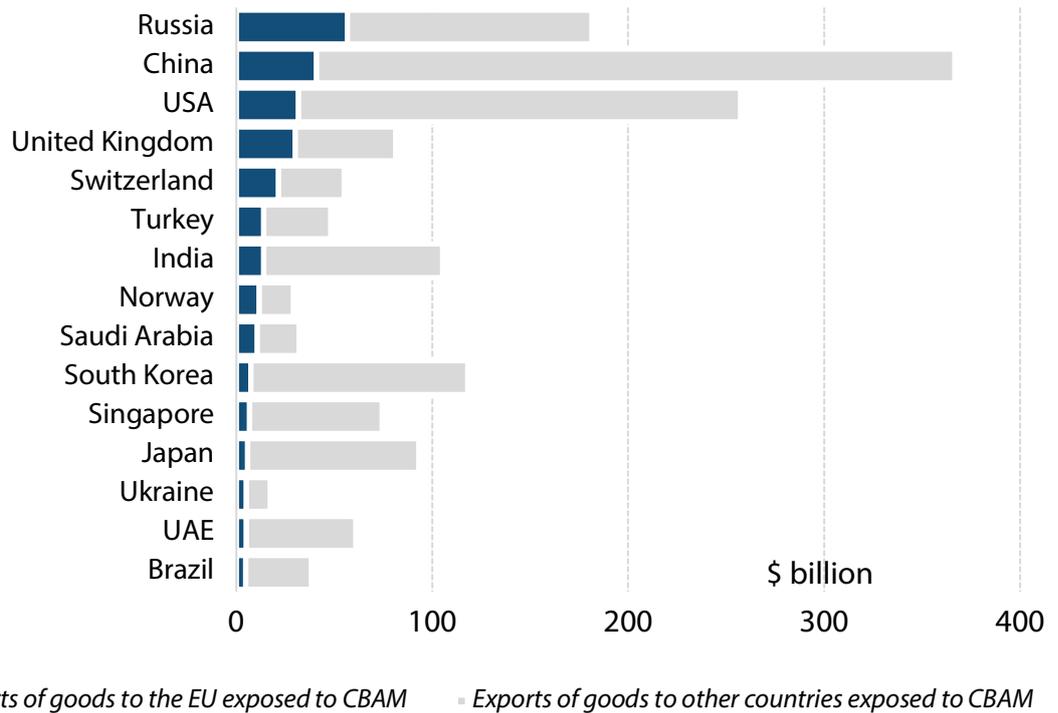


Figure 1. The volume of Russia's and other countries' exports to the EU exposed to CBAM in absolute values in 2019

Note:

- 1) based on data from the Federal Customs Service and International Trade Centre.
- 2) Switzerland and Norway are likely to get an exception from CBAM.

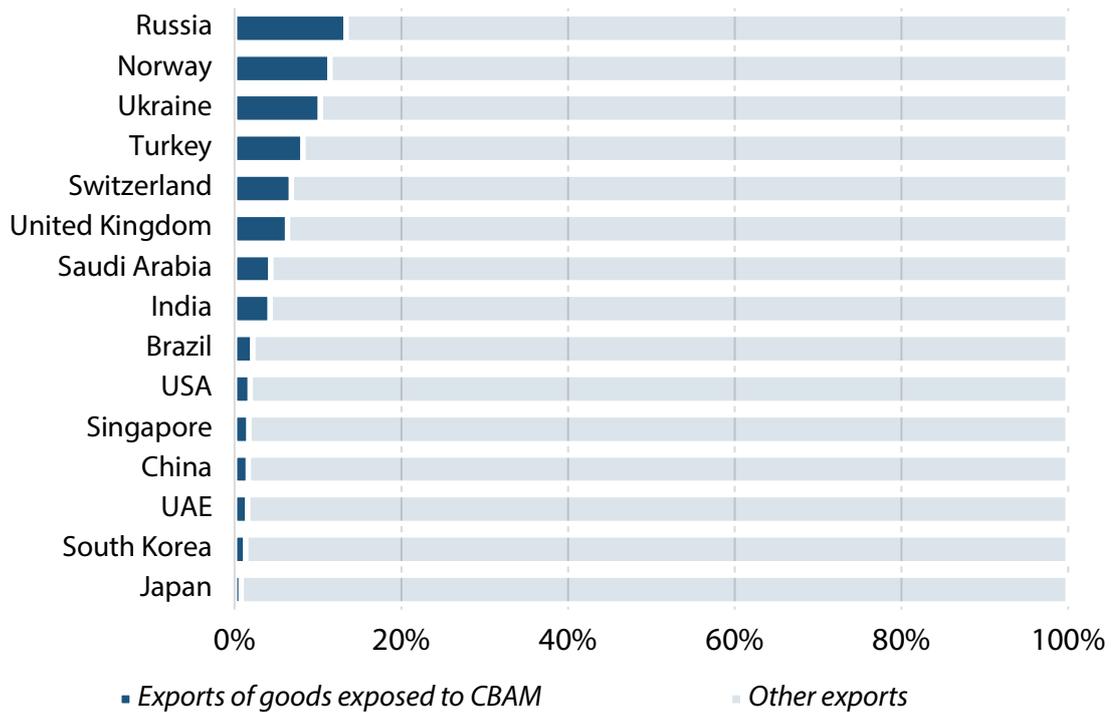


Figure 2. The volume of Russia’s and other countries’ exports to the EU exposed to CBAM as share of total exports in 2019

Note:

- 1) based on data from the Federal Customs Service and International Trade Centre
- 2) Switzerland and Norway are likely to get an exception from CBAM.

Additional costs of the EU CBAM for the Russian industry could amount to \$0,7–1,8 billion depending on combination of CBAM key elements: sectoral scope, emissions scope (Table 1)¹. Moreover, CBAM implementation will have indirect effects on the Russian economy such as a decline in raw materials production due to lower demand from sectors exposed to the mechanism. Indirect effects of CBAM on electricity and heat generation and oil production could exceed \$0,4 billion (Table 2). Hence, the total direct and indirect effects on the Russian economy could amount to \$2,2 billion. If the CBAM payment rate increases, costs of EU CBAM will proportionally rise.

Table 1 – Potential annual costs of Russian exporters depending on sectoral and emissions scope of CBAM, \$ billion

Options of sectoral scope	Options of emissions scope			
	I	II	III	IV
	Direct emissions (Scope 1)	Direct and indirect	Direct and indirect	Direct and all other indirect

¹ Calculations were made taking into account the payment rate of \$27,81 / tCO₂eq. In the long term a possible increase in payment rate will lead to a proportional increase in costs of the EU CBAM for Russian exporters.

		emissions from purchased electricity, heat and steam (Scope 1, 2)	emissions (Scope 1, 2, 3)*	emissions (Scope 1, 3)*
«a» Upstream	0.70	1.12	1.34	0.90
«b» Upstream + electricity generation	0.83	1.26	1.48	1.05
«c» Upstream + electricity generation + downstream	0.86	1.31	1.77	1.30

Note:

- 1) estimates made by IPEM based on ERCST's scenarios,
- 2) * – taking into account Scope 3 emissions only for ferrous metallurgy,
- 3) colours show the following scenarios:

	«Most safe»
	«Most probable»
	«Most ambitious»
	«Optimal for a pilot phase»

Table 2 – Potential decrease in electricity and heat generation and oil production

Economic activity	Potential decrease in production		Production volume in 2019 (\$ billion)	Potential decrease in production (\$ million)	
	Excluding Scope 3 emissions for ferrous metallurgy	Including Scope 3 emissions for ferrous metallurgy		Excluding Scope 3 emissions for ferrous metallurgy	Including Scope 3 emissions for ferrous metallurgy
Electricity generation	0.19%	0.22%	61 258.5	115.4	136.3
Heat generation	0.10%	0.11%	25 243.4	24.9	28.6
Oil production	0.13%		170 232.1	227.0	
Total	-	-	256 734.0	367.3	391.9

Note – Based on calculations made using data from Rosstat and Russian Energy Agency.

For a range of goods CBAM could become the key factor determining supply profitability and competitiveness in the EU market. Too high costs of EU CBAM could lead to a halt of supplies to the EU. The most vulnerable carbon-intensive goods are electricity, pig iron, raw materials for construction (lime, concrete), ammonia etc. For these goods even such CBAM prices as \$6–14 / tCO₂eq (that is far lower than the carbon price in the EU ETS) could lead to high payments (more than 10% of the export value). Production of chemicals, aluminium and pulp are also at risk (Figure 3). If Scope 3 emissions are taken into account when calculating the carbon footprint of goods, steel and rolled steel will join this list.

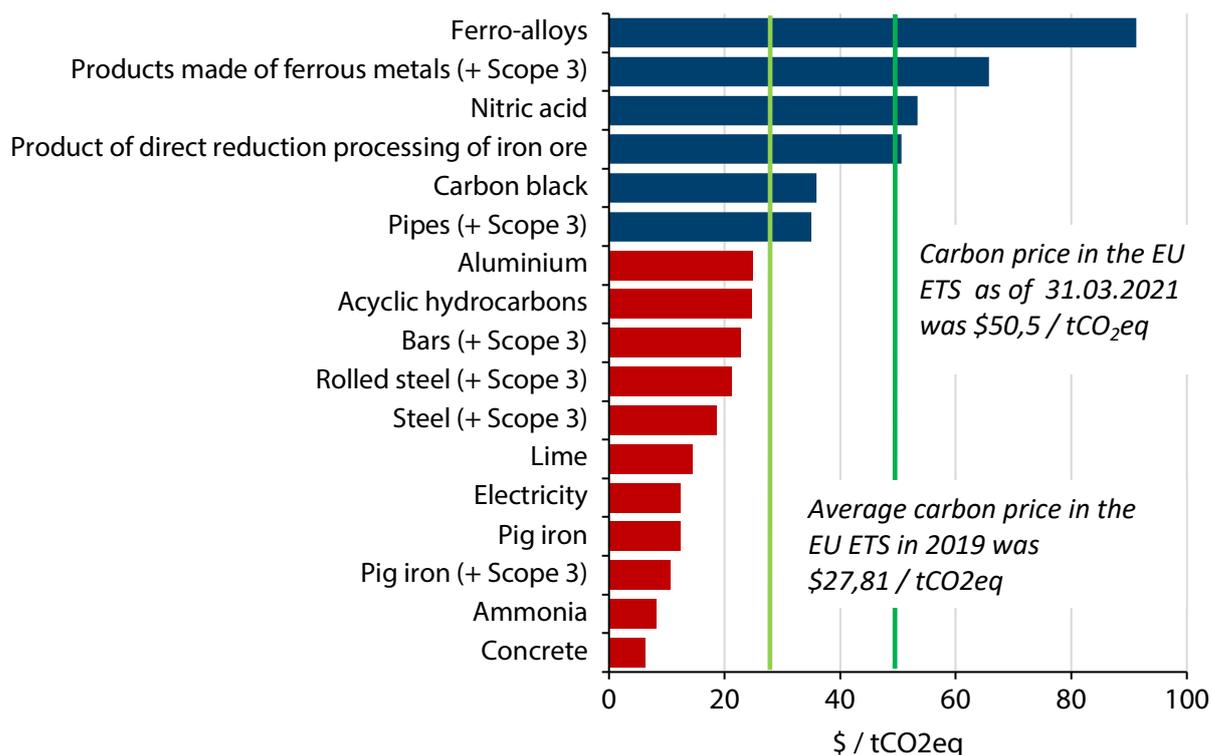


Figure 3. CBAM payment threshold at which the expected costs of CBAM exceed 10% of the export value

Note:

- 1) based on data from the Federal Customs Service in 2019;
- 2) «+ Scope 3» – including Scope 3 emissions (only for ferrous metallurgy).

In order to minimize potential CBAM’s effects a whole set of measures is required. This set of measures largely depends on CBAM design. In any case within Russia’s negotiating position there is a need to focus the EU’s attention on the feasibility of implementing a less discriminatory CBAM design. The main conditions of such design are:

- limiting the sectoral coverage of CBAM to a small list of carbon-intensive goods produced within a simple supply chain,
- suspension of CBAM implementation for sectors that will continue receiving free allowances under the EU ETS,
- limiting the emissions scope of CBAM to direct emissions (Scope 1),
- using benchmarks only to determine direct emissions (Scope 1),
- if CBAM will cover indirect emissions from purchased electricity, heat and steam (Scope 2) – using actual producer-based data to determine them,

- securing the producer’s right to challenge the default (benchmark) emissions values,
- taking into account different climate policies of importing countries, including carbon offsets,
- mutual recognition of results of monitoring and verification between importing countries and the EU.

In case of implementation of the above stated measures potential CBAM’s effects could be minimized within Russia through:

- development of national methodology of calculating indirect emissions,
- development of mechanisms to minimize the carbon footprint of consumed electricity and heat (green certificates),
- support of «green» and «low carbon» power generation (primarily hydro and nuclear power plants and highly efficient combined cycle gas turbines in thermal power plants),
- calculation and publication of the effective carbon price for electricity and heat,
- stimulation of voluntary compensatory projects (carbon offsets).