



European CBAM: consequences for Russia's economy

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ERCST

Roundtable on
Climate Change and
Sustainable Transition

Why BCA now?

- Running out of free allocation (2020 State of the ETS), what will happen next?
- Clear EU intention to lower the cap which accelerates and puts urgency to the issue
 - For sectors less exposed to carbon leakage, free allocation is foreseen to be phased out by 2030
- The **Carbon Border Adjustment Mechanism (CBAM)** could represent an alternative to free allocation against carbon leakage

Table 4: CSCF value in 2030 under 2 demand scenarios for 3 possible targets

	Conservative demand scenario	High demand scenario
Current target	100%	100%
50% by 2030	100%	72%
55% by 2030	100%	65%

Source: BloombergNEF

History of the BCA Objective

- The current debate is to **level the playing field** in order to:
 - protect against consumption carbon leakage
 - is it to increase the level of ambition
- The reality is that it is linking the playing field and in a “necessary” condition to these is a political decision to lower the cap
 - Should provide the level playing field at any level of cap
- EC Inception Impact Assessment => Public Consultations => Impact Assessment => Proposal (expected June 2021 together with Fit for 55% package)

European Commission main options

- **A tax applied on imports at the EU border**
 - On products whose production is in sectors that are at risk of carbon leakage
 - This could be a border tax or customs duty
- **An extension of EU Emission Trading Scheme to imports**
 - Requiring the purchasing of emission allowances under the EU ETS by either foreign producers or importers
- **Carbon tax (e.g. excise or VAT type) at consumption level**
 - On products whose production is in sectors that are at risk of carbon leakage
 - The tax would apply to EU production, as well as to imports
- **The obligation to purchase allowances from a specific pool outside the ETS**
 - Dedicated to imports, which would mirror the ETS price

ERCST Timeline of the project

- **Project** “Border Carbon Adjustments in the EU: Issues and Options”
 - **Report** launch 30 September 2020
 - Economic Impact Methodology event 14 October 2020
 - **Global Townhall** 20-21 January 2021
- Submitted **Feedback** to Inception Impact Assessment consultation
 - Discussion & Synthesis Paper on Feedback to IIA (May 28)
 - Public consultation questionnaire until October 28
- **International outreach** (‘Virtual Town Halls’) with EU trade partners: USA, South Korea, India, Japan, South Africa, Mexico, Russian Federation, Ukraine + **Global Townhall**
- **Stakeholder engagement and convening**

<https://ercst.org/border-carbon-adjustments-in-the-eu/>

ERCST activities Part II

Reports:

- **A sectoral assessment (March)**
- **A BCA proposal**
- **An analysis of the EC's CBAM proposal expected by June 2021**
- **A proposal for a framework and pathway for introducing different policy measures to address carbon leakage and competitiveness**

Activities:

- Stakeholder consultations
- Continued international dialogue - town halls
- Additional interactions

The goal of the sectoral assessment

- An introduction setting out the objectives of the study and our methodology, including the questions
- A detailed profile of each of the main sectors under discussion for potential inclusion in the scope of the CBAM that:
 - includes quantitative and qualitative information on each sector with relevance for the suitability and design of a CBAM
 - presents this information for each sector in a largely uniform format, allowing easier comparison/analysis across sectors
 - offers takeaways for each sector on the implications of sector characteristics for a CBAM
- And a concluding, cross-cutting analysis at the end that discusses what this means for which sectors to include or not, what it spells for CBAM design etc.

Sectoral assessment – key questions

- **Market structure and dynamics in your sector in the EU**
- **Environmental considerations in the EU**
- **Foreign production:**
 - Emissions intensity
 - Resource shuffling
- **Trade patterns in your sector**
- other, relevance to participate in the pilot, reaction to alternative approaches including the consumption charges

Our Approach: Decomposing, Evaluating & Comparing

• Design Elements:

- Coverage of trade flows
- Policy mechanism
- Geographic scope
- Sectoral scope
- Emissions scope
- Determination of embedded emissions
- Calculation of adjustment
- Use of revenue

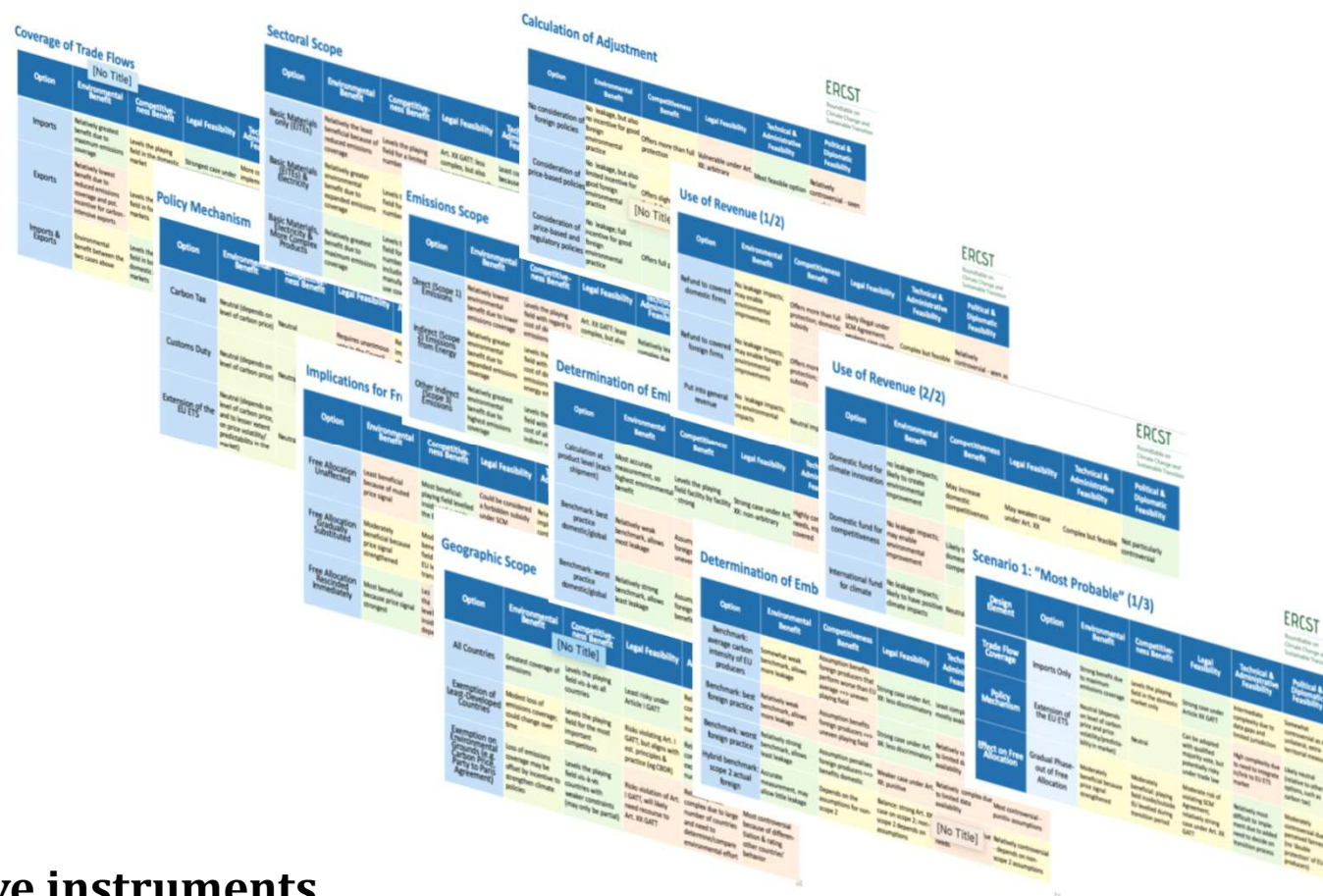
• Evaluation Criteria:

- Environmental benefit
- Competitiveness benefit
- Legal feasibility
- Technical and administrative feasibility
- Political feasibility
 - Material neutrality
 - Global environmental benefits

• Scenario-Building:

- 'Most Probable'
- 'Play it Safe'
- 'Go Getter'

• Comparisons with alternative instruments



Key issues – not a silver bullet

Key issues/challenges:

- **Trade flow coverage:** Consider role of European exports and their competitiveness in foreign markets
- **Free allocation:** Replacing free allocation will face considerable pushback in the EU, making a phased approach more likely
- **Sectoral scope:** Basic goods with relatively low trade-intensity – such as cement – may offer a good piloting opportunity; also possible: electricity
- Avoiding **resource shuffling** and **evasion tactics** will be challenging
- **Revenue use:** International revenue transfers face political obstacles
- **Crediting for foreign policies:** complex but likely necessary

High Level Takeaways

- **Context.** Europe's CBAM is being elaborated as we approach several important crossroads. Timeline rapidly shrinking. EU not alone in challenges of leakage and competitiveness.
- **Raising ambition and solving leakage are intertwined.** EU's announced global leadership on climate welcome and necessary, but unlikely to materialize if no solution to leakage and competitiveness problems. Not a sufficient condition, but necessary one (free allocation vs BCA).
- **Legal challenges.** WTO compatibility and GATT Article XX environmental exemptions – are they constraints? Implications for BCA design and implementation
- **Complexity** makes it impractical for large number of complex products
- **CBAM: a silver bullet?** EC has hopes on border carbon adjustment. It puts pressure on a useful instrument, but it is no silver bullet; problems may keep it from ever being adopted. CBAM needs a framework emerging at different levels of governance in the EU - internal vs external (poss. export rebates)

Different Instruments for Different Functions

Three fundamental issues need to be addressed by a BCA and other approaches:

- Continuation of carbon leakage protection
- Impact of free allocation on downstream carbon price signals
- Creation of a market for low carbon products
- Possibilities for combination of instruments

The tools identified (BCA, consumption charges, CCfD) will play different roles and meet different needs

A more robust approach is to **identify what functions each of these tools can address on their own, or possibly in combination**

Different Instruments for Different Functions

Possibilities for combination of instruments

- **CBAM** meant to accompany EU ETS - a CBAM has many advantages, but can only be used selectively and with clear purpose.
- **Consumption charges** ensure cost of carbon is internalized under free allocation. It would fix problem of free allocation muting carbon price signal.
- **CCfDs** not intended to deliver functions of CBAM or free allocation. Can be synergetic to an ETS when carbon price too low with funds levied through a CBAM, consumption charges or auctioning.
- Need for combining policy instruments to meet all functions listed

Quantitative Assessment: Focus and Objectives

- ERCST started an exercise aimed at estimating the economic costs that an EU CBAM could potentially impose – as additional tax burden – on importers (or foreign exporters) of products to the EU market
- The analysis considers different design options of the CBAM instrument, assessing how the key challenges could be addressed
 - Each scenario depicts a specific storyline influencing the design of the CBAM
 - Each design approach has consequences on the total additional costs imposed by sector/product and on the degree of legal feasibility under WTO trade law
- Elements considered:
 - Trade coverage: **Imports** to the EU27
 - Geographical scope: **Russian Federation**
 - Sectoral scope: **Cement, Aluminium, Steel and Electricity**
 - Emissions scope: **Scope 1 and Scope 1 & 2**
 - Context: **full or partial replacement of Free Allocations**

General Assumptions

- Significant **uncertainty remains over the design of the EU CBAM** that the European Commission will propose in 2021
- We put forward the following assumptions:
 - The most carbon-intensive and imported products would likely be affected i.e. at risk of leakage
 - The CBAM would initially cover imports of a number of selected products and would be gradually extended
 - The additional cost imposed on imports could be based on a default value e.g. the average carbon intensity of EU producers, or depend on the carbon content of imported products
 - One way to prevent carbon leakage would be to include imports under the EU ETS
 - The CBAM should be fully compliant with World Trade Organization (WTO) rules

Scenarios

Scenario	Approach to calculating CBAM	Explanatory notes
(1)	$EUA_{CO_2 \text{ price}} * EU_{CO_2 \text{ intensity}}$	<ul style="list-style-type: none"> Carbon price for imports to EU equals price of EU ETS allowances ($EUA_{CO_2 \text{ price}}$) Exporters emissions determined based on average CO₂ intensity of EU producers ($EU_{CO_2 \text{ intensity}}$)
(2)	$EUA_{CO_2 \text{ price}} * non - EU_{CO_2 \text{ intensity}}$	<ul style="list-style-type: none"> Carbon price for imports to EU equals price of EU ETS allowances ($EUA_{CO_2 \text{ price}}$) Exporters emissions determined based on average CO₂ intensity in exporting countries (non-$EU_{CO_2 \text{ intensity}}$)
(3)	$EUA_{CO_2 \text{ price}} * \Delta_{CO_2 \text{ intensity}}$	<ul style="list-style-type: none"> Carbon price for imports to EU equals price of EU ETS allowances ($EUA_{CO_2 \text{ price}}$) Exporters pay for the part of average CO₂ intensity in exporting countries in excess to the average EU CO₂ intensity ($\Delta_{CO_2 \text{ intensity}}$)
(4)	$\Delta_{CO_2 \text{ price}} * EU_{CO_2 \text{ intensity}}$	<ul style="list-style-type: none"> Crediting for foreign carbon pricing policies (carbon tax or ETS), carbon price for imports equals the difference between EU ETS allowance price and carbon prices in exporting countries ($\Delta_{CO_2 \text{ price}}$) Exporters emissions determined based on average CO₂ intensity of EU producers ($EU_{CO_2 \text{ intensity}}$)
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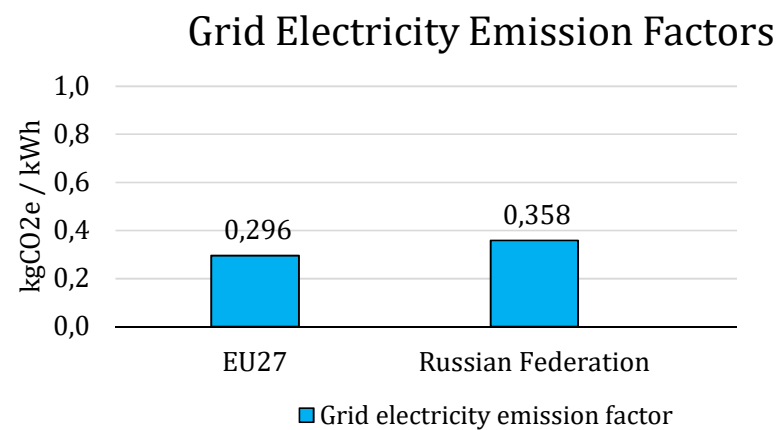
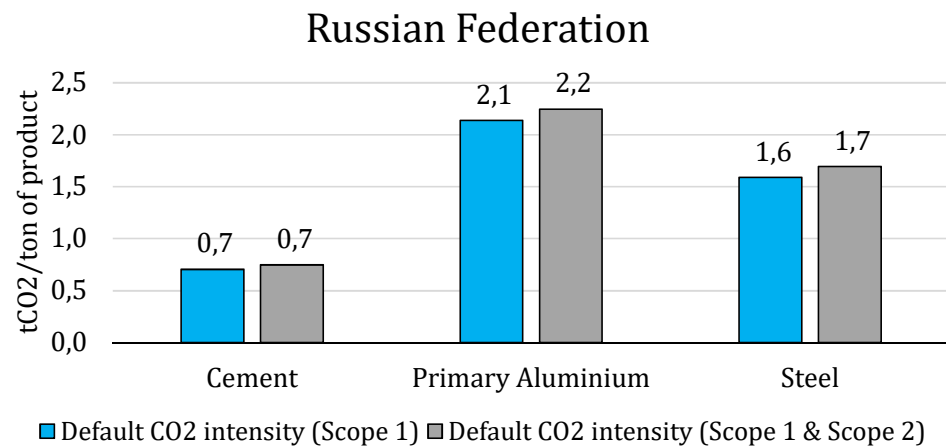
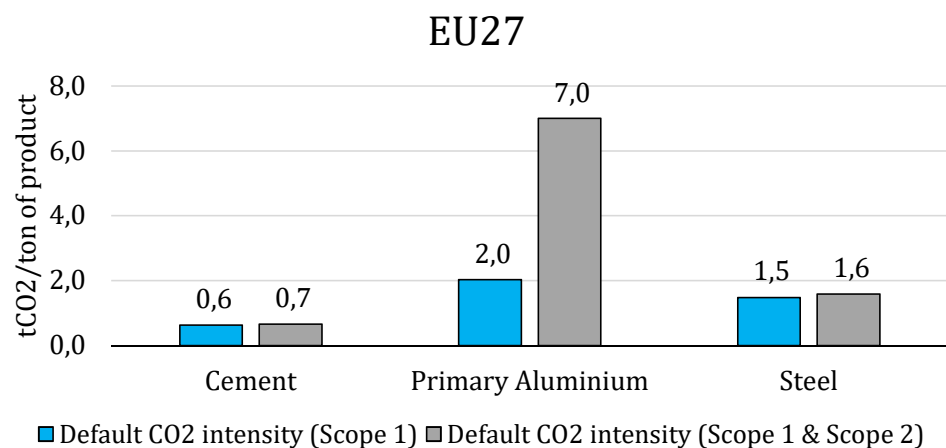
No foreign carbon price crediting

With foreign carbon price crediting

Further Comments on the Scenarios

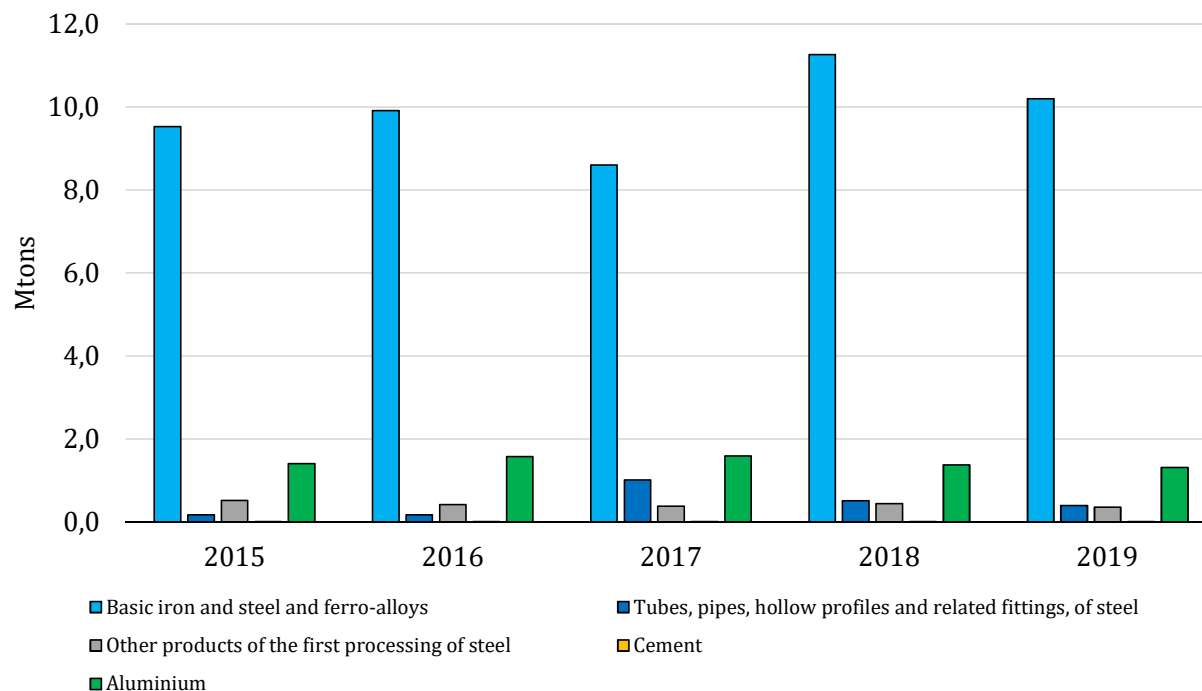
- We assume that the CBAM will be based on 2 components:
 - the **carbon price**
 - the **carbon content** of imports
- Each design option would have different implications in terms of
 - Legal feasibility (WTO rules)
 - Technical and administrative feasibility (including data needs)
 - Political and diplomatic feasibility (risk of controversy)
- The first scenario (1) would treat all imports equally and not less favourably than the average European producer
- Foreign producers could be granted the possibility to individually prove that they are cleaner than the default emission intensity

Default Emission Intensities

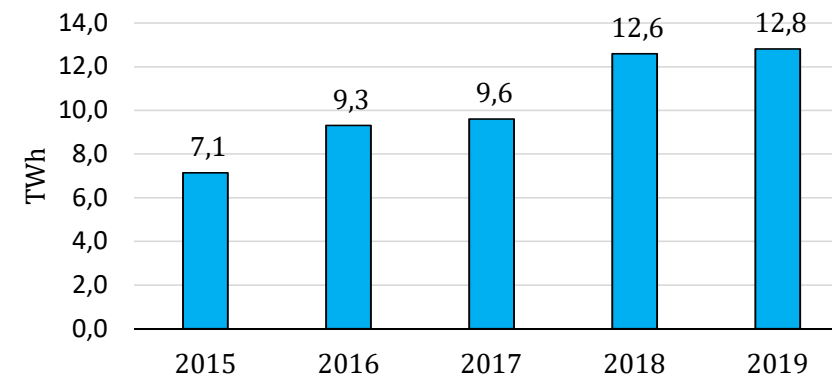


Volume of Imports from the Russian Federation

Imports of Steel, Aluminium and Cement



Electricity Imports



Source: COMEXT and Sandbag (2020), The path of least resistance

We rely on 2019 trade data and assume no changes in trade patterns.

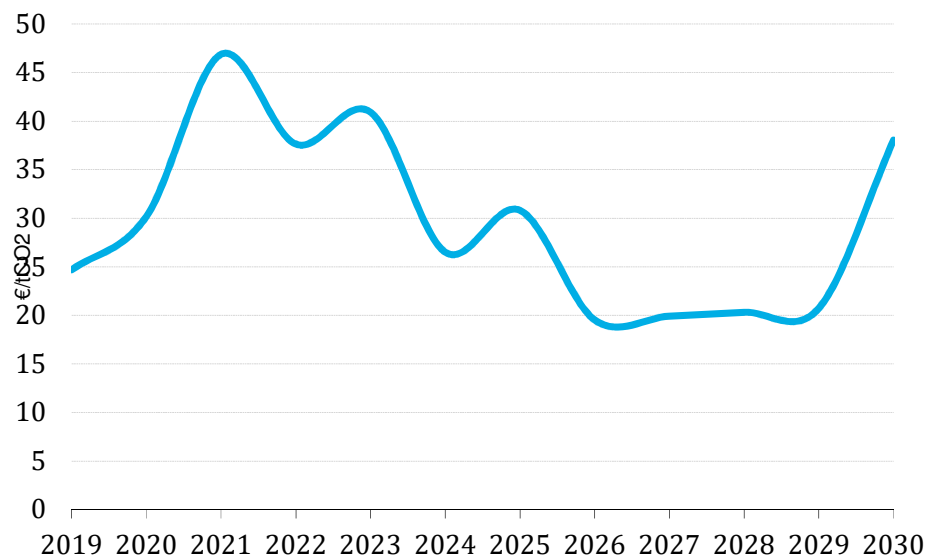
Assumptions on Carbon Pricing

- **Carbon pricing in the EU27 in 2023**

- *Forecasts* from Bloomberg NEF (40.9 €/tCO₂)

- **Carbon pricing in non-EU countries**

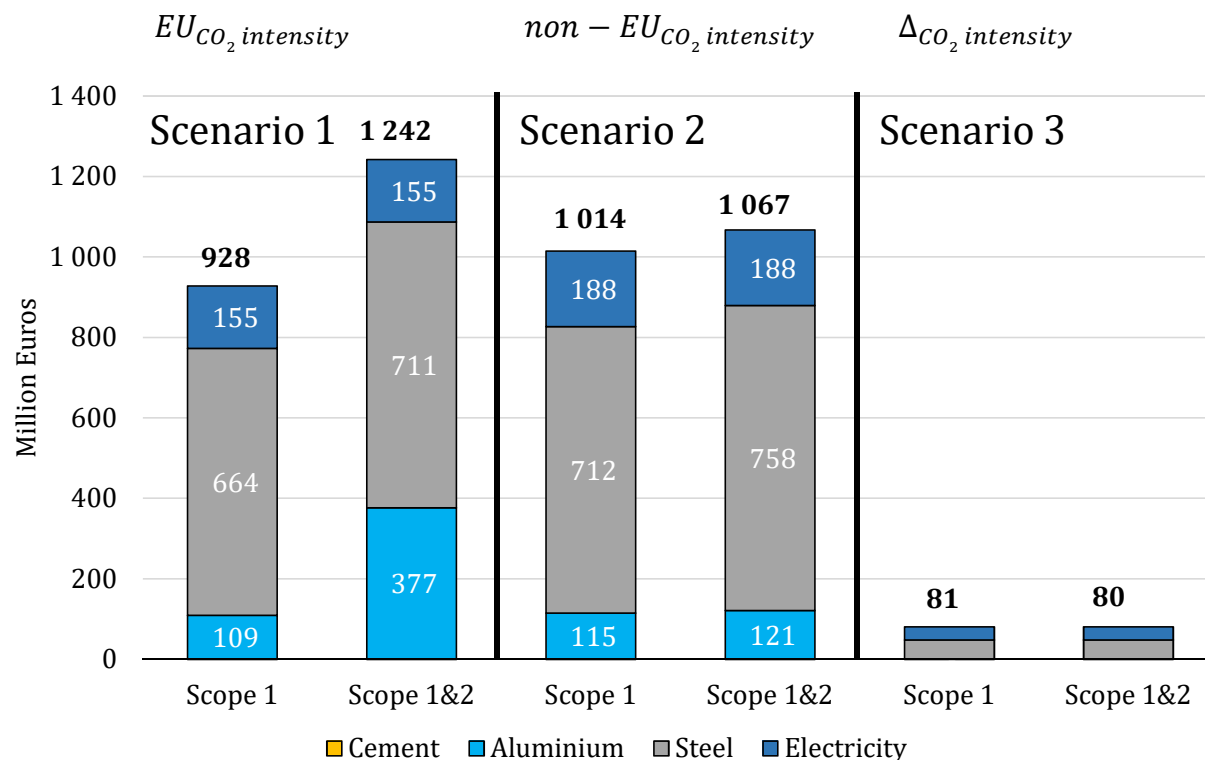
- *ETS prices* in the Russian Federation from the OECD (2016) Effective Carbon Rates database
- Cross checked with the World Bank (2020) State and Trends of Carbon Pricing 2020



- **Sensitivity Analysis**

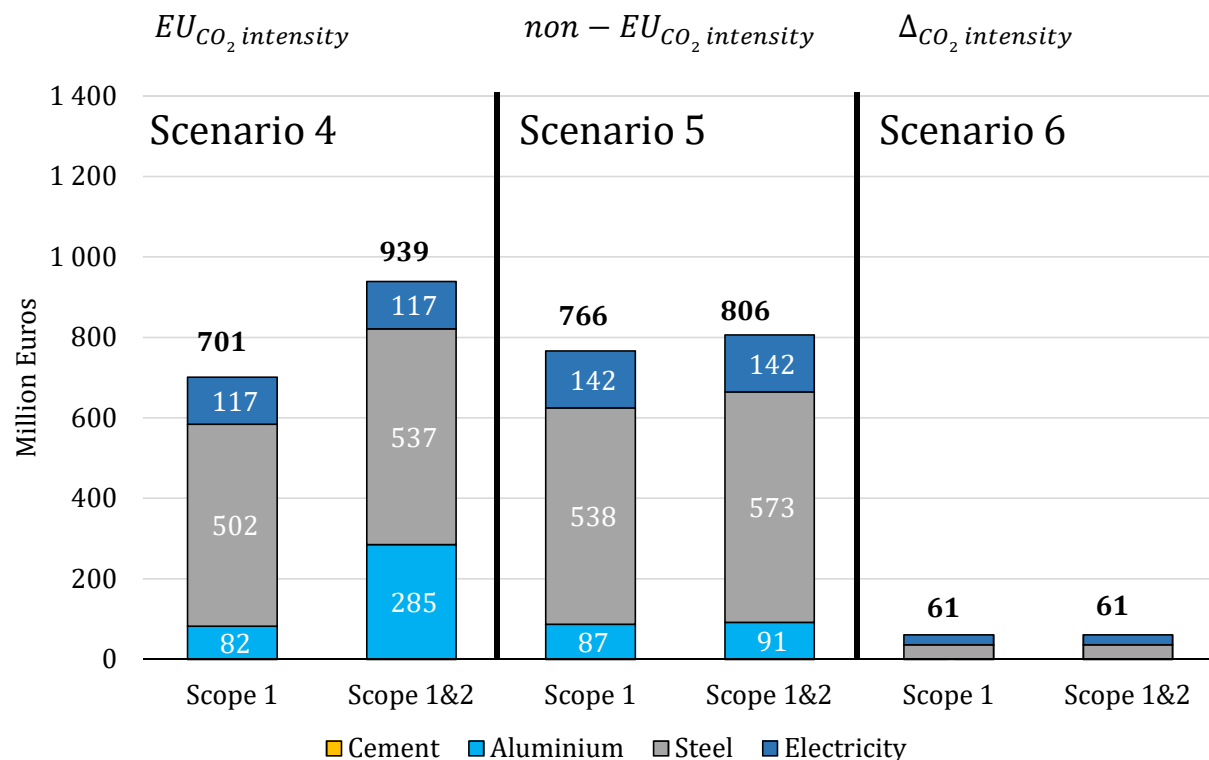
- Introduction of ETS systems in the Russian Federation:
- ETS price of 10 €/tCO₂

Results for the Russian Federation



- Average annual additional costs can vary considerably across sectors
- **Key factors:** trade volumes and emissions
- Adoption of EU default emission intensities would generate the highest total costs when including Scope 1 and Scope 2 emissions
- Largest tax burden expected on steel (highly traded product), but significant for aluminium and electricity too
- Costs for cement are lower in absolute terms, but between 40% and 48% of exports value to the EU)

Sensitivity Analysis for the Russian Federation



- Crediting for foreign carbon pricing policies could significantly reduce the total tax burden
- **Key factors:** trade volumes and emissions
- Adoption of EU default emission intensities would generate the highest total costs when including Scope 1 and Scope 2 emissions
- Costs for cement are reduced, but still between 30% and 36% of exports value to the EU

Key observations and issues

- The EU CBAM could have **highly diversified impacts** depending on the adopted design, sectoral and emission scope (up to 1.2 €billion for Russia in 2023)
- The CBAM is a **complex** policy tool and numerous issues need to be addressed:
- Use of EU or foreign **default emission intensities**
 - Should be product specific and change over time to reflect technology change
 - Problems for implementation related to data availability, especially for foreign countries
- Allow for process to **challenge carbon intensity default values**
 - Foreign producers could be granted the possibility to individually prove that they are cleaner
 - This could potentially reduce the tax burden imposed by the EU CBAM
- Allow for **crediting of existing policies** in non-EU countries
 - Which policies should be credited? ETS systems? Carbon taxes? Other environmental policies?
- How will CBAM revenues be used?



Thank you

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