



# 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

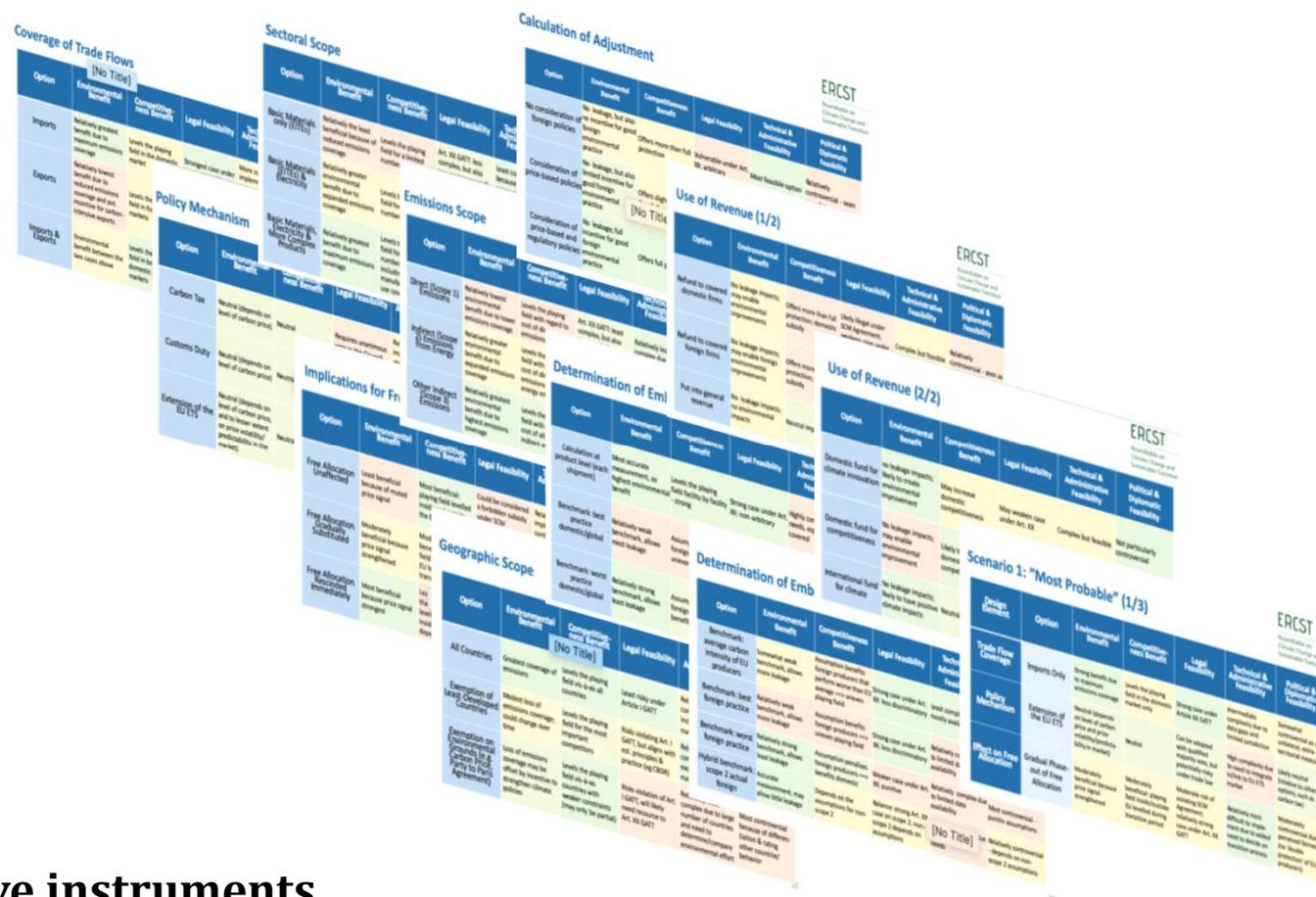
### • Evaluation Criteria:

- 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"> <li>Carbon price for imports to EU equals price of EU ETS allowances (<math>EUA_{CO_2 \text{ price}}</math>)</li> <li>Exporters emissions determined based on average CO<sub>2</sub> intensity of EU producers (<math>EU_{CO_2 \text{ intensity}}</math>)</li> </ul>
(2)	$EUA_{CO_2 \text{ price}} * non - EU_{CO_2 \text{ intensity}}$	<ul style="list-style-type: none"> <li>Carbon price for imports to EU equals price of EU ETS allowances (<math>EUA_{CO_2 \text{ price}}</math>)</li> <li>Exporters emissions determined based on average CO<sub>2</sub> intensity in exporting countries (non-<math>EU_{CO_2 \text{ intensity}}</math>)</li> </ul>
(3)	$EUA_{CO_2 \text{ price}} * \Delta_{CO_2 \text{ intensity}}$	<ul style="list-style-type: none"> <li>Carbon price for imports to EU equals price of EU ETS allowances (<math>EUA_{CO_2 \text{ price}}</math>)</li> <li>Exporters pay for the part of average CO<sub>2</sub> intensity in exporting countries in excess to the average EU CO<sub>2</sub> intensity (<math>\Delta_{CO_2 \text{ intensity}}</math>)</li> </ul>
(4)	$\Delta_{CO_2 \text{ price}} * EU_{CO_2 \text{ intensity}}$	<ul style="list-style-type: none"> <li>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 (<math>\Delta_{CO_2 \text{ price}}</math>)</li> <li>Exporters emissions determined based on average CO<sub>2</sub> intensity of EU producers (<math>EU_{CO_2 \text{ intensity}}</math>)</li> </ul>
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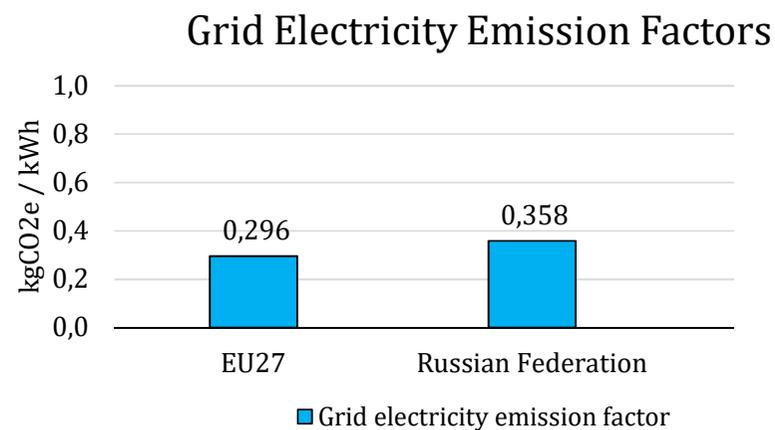
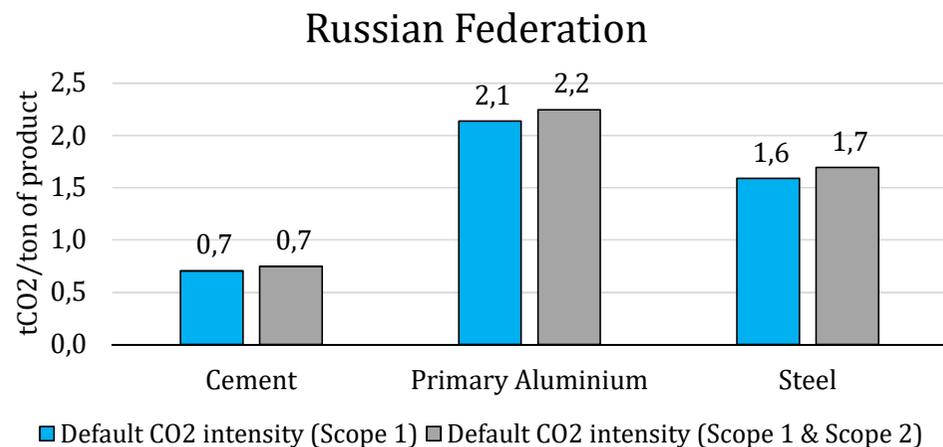
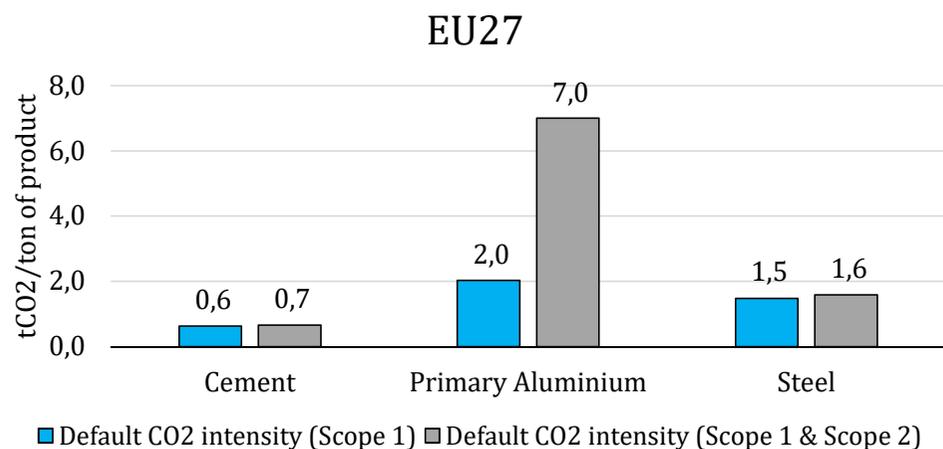
No foreign carbon price crediting

With foreign carbon price crediting

## Further Comments on the Scenarios

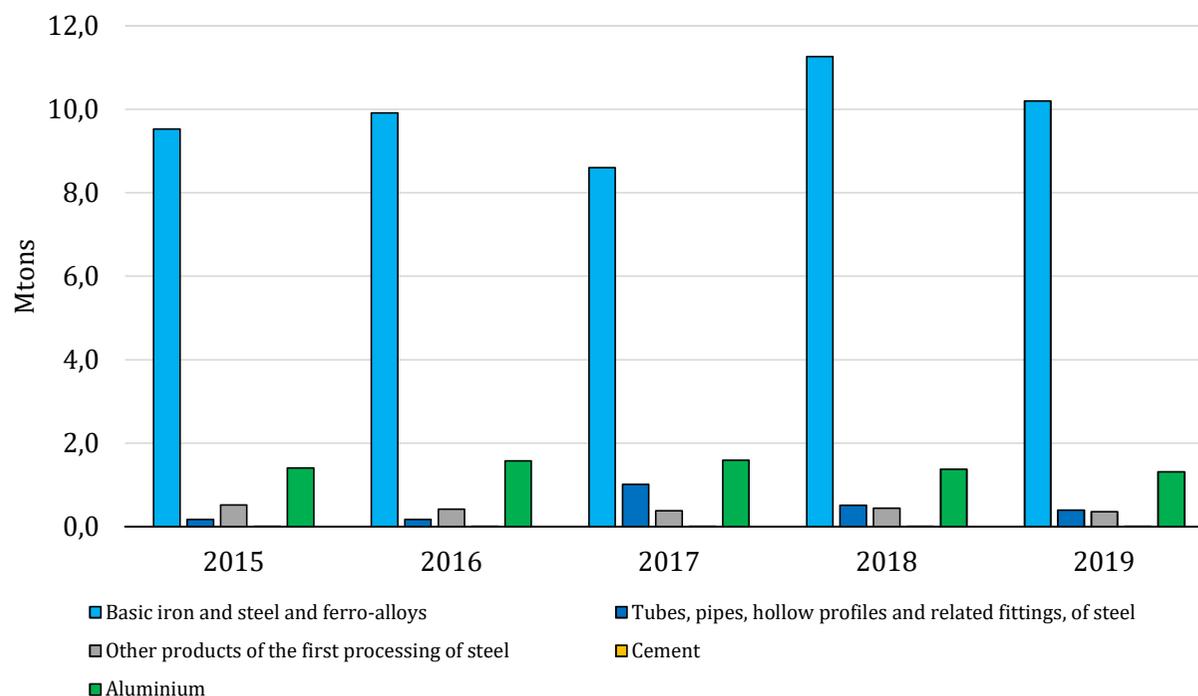
- We assume that the CBAM will be based on 2 components:
  - the **carbon price**
  - the **carbon content** of imports
- Each design option would have different implications in terms of
  - Legal feasibility (WTO rules)
  - Technical and administrative feasibility (including data needs)
  - Political 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

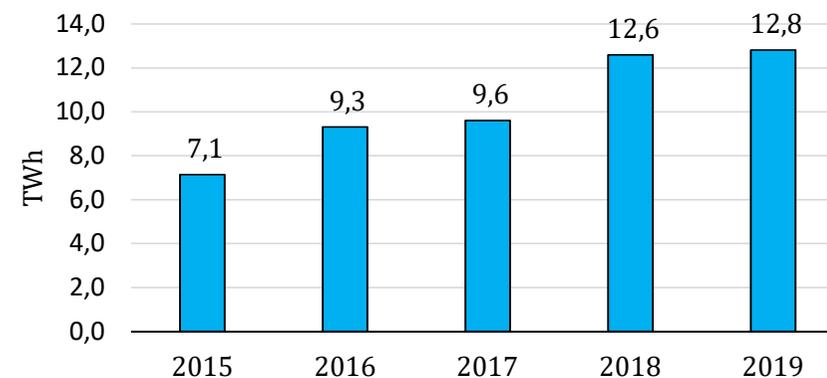


## Volume of Imports from the Russian Federation

### 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.

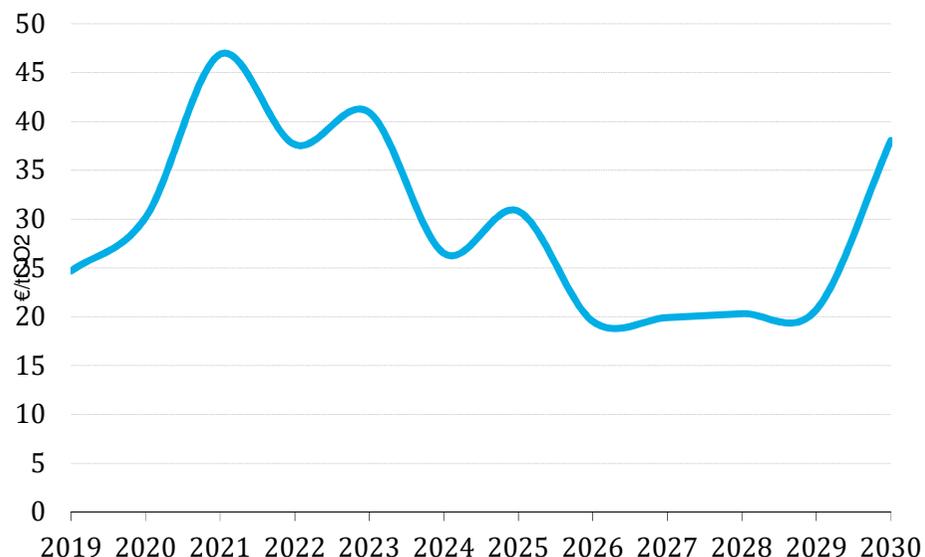
# Assumptions on Carbon Pricing

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

- *Forecasts from Bloomberg NEF (40.9 €/tCO<sub>2</sub>)*

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

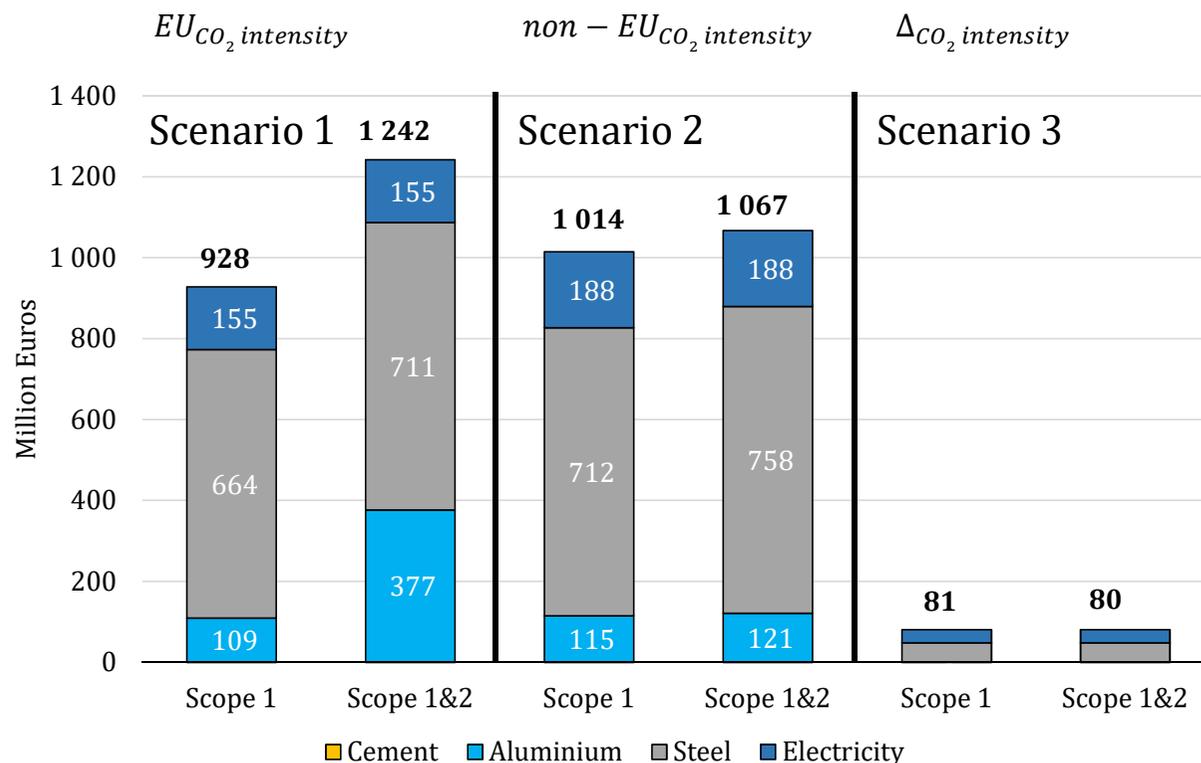
- *ETS prices in the Russian Federation from the OECD (2016) Effective Carbon Rates database*
- *Cross checked with the World Bank (2020) State and Trends of Carbon Pricing 2020*



- **Sensitivity Analysis**

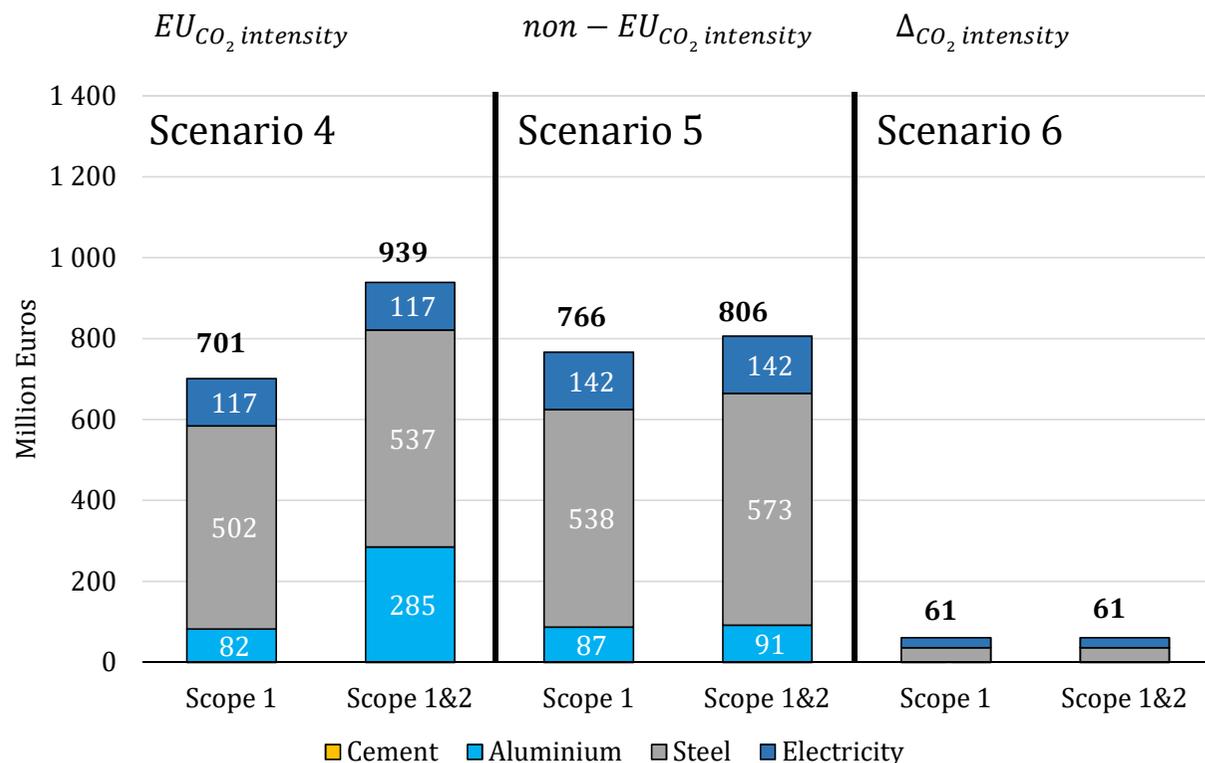
- Introduction of ETS systems in the Russian Federation:
- ETS price of 10 €/tCO<sub>2</sub>

## 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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