



# **Towards carbon neutrality**

## **~Challenge of Japanese & EU industry and system~**

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CBAM and Carbon Pricing

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**ERCST**

Roundtable on  
Climate Change and  
Sustainable Transition

## Scope of discussion

- EU-ETS and CBAM: free allocation and its relationship with CBAM - complementary or alternative measure?
- Objectives of CBAM, carbon leakage risk, etc.
- WTO compliance discussion: what are sticking points and negotiation status (e.g. US, Russia, China)
- Member States on the same page? CEE members Transition issue.
- Sectoral scope and implications to EU and non-EU industries (EU and Japan industry representatives will join the panel, so would be an interesting exchange of views)
- EU institutions' various initiatives (e.g. COM, EP, Council)

# International climate situation: asymmetry of climate targets

- Several countries have announced **Net Zero targets by 2050 (China 2060)** however only a **few countries increased their ambition in the updated NDC targets by 2030**

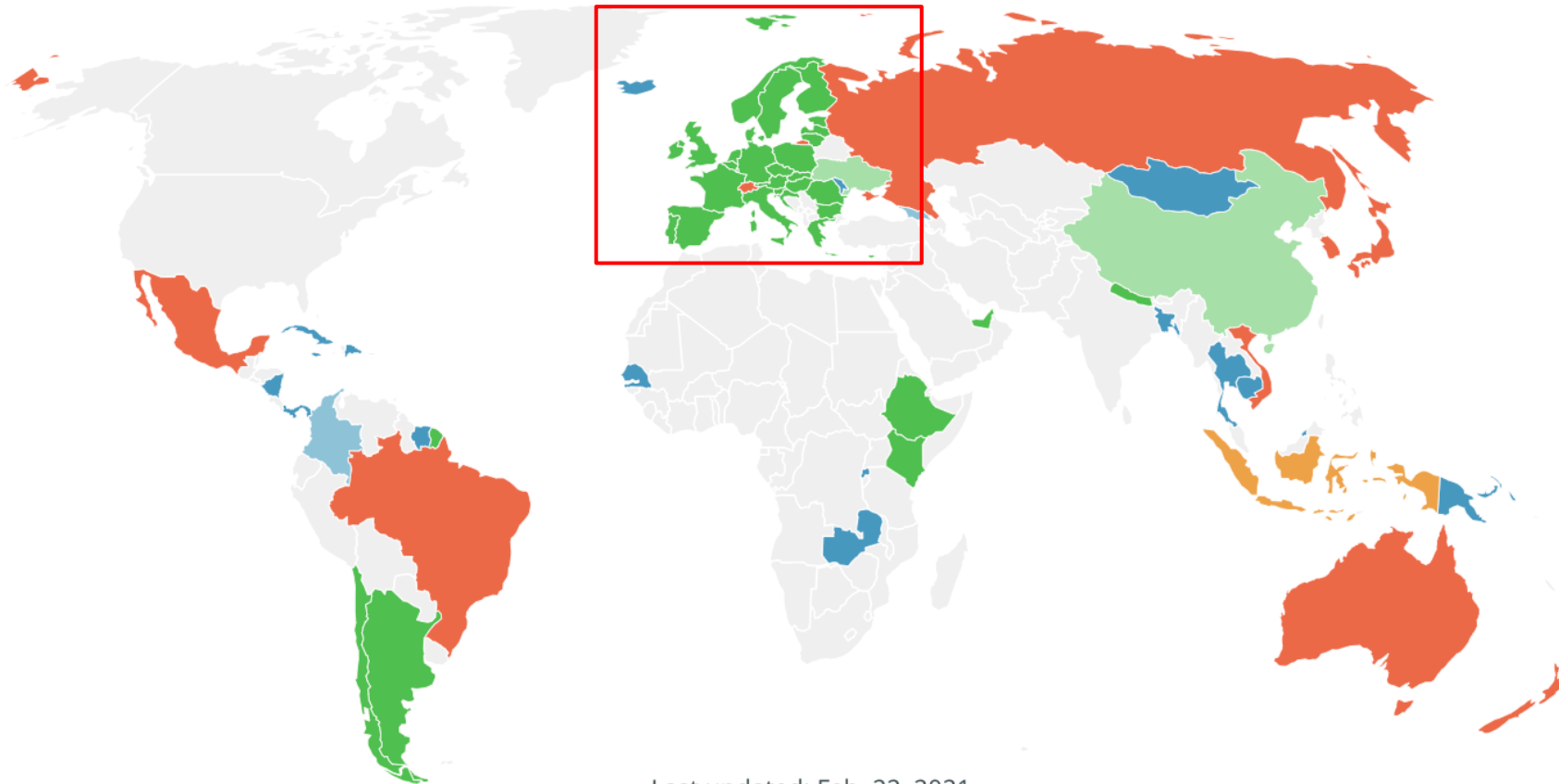
## 2030 Climate Targets

- **EU:** “Endorses a binding EU target of **reduction of at least 55% in greenhouse gas emissions by 2030 compared to 1990**. Calls on the co-legislators to reflect this new target in the **European Climate Law proposal** and to adopt the latter swiftly” (11 Dec 2020)
- 73 countries (including EU 27) have submitted a new or updated NDC
- However out of this 73 only a **few countries submitted a stonger NDC target:** EU (as a party), Argentina, Chile, Ethiopia, Kenya, Nepal, Norway, UAE, UK

## 2050 Net Zero Targets

- **58 countries have communicated a net-zero targets** including: EU (as a party), Canada, USA, UK, Japan, South Africa, South Korea and China (by 2060), etc.

# 2030 Climate Targets: European Union ahead of the curve compared to the rest of the world



Last updated: Feb. 22, 2021

Map is for reference only

## CLIMATE TARGETS

Status of the 2020 NDC update process

- 44** Countries have **submitted** new NDC targets (43 countries plus the EU27)
  - 9** Countries we analyse have submitted **stronger NDC targets** (8 countries plus the EU27)
  - 10** Countries we analyse **did not increase ambition**
  - 25** Countries **we do not analyse** submitted new NDC targets
- 5** Countries have **proposed** new NDC targets
  - 2** Countries we analyse have proposed **stronger NDC targets**
  - 1** Countries we analyse stated they **will not propose more ambitious targets**
  - 2** Countries **we do not analyse** proposed new NDC targets
- 114** Countries have not updated targets

# BCA Definition

- **Border carbon adjustments (BCAs)** seek to alleviate negative effects of asymmetrical climate policies
- They can have three main **objectives**:
  - level the playing field in competitive markets
  - prevent leakage of carbon emissions to jurisdictions with weaker policies
  - incentivise trade partners to strengthen their own climate efforts

# Methodology

## Eight design elements:

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

## Five evaluative criteria

- Environmental benefit
- Competitiveness benefit
- Technical and administrative feasibility
- Legal feasibility
- Political and diplomatic feasibility

# Introduction: Our Approach

- Our previous work has **unpacked CBAM design elements** and implementation options, highlighting the **complexity** of this instrument and the **trade-offs** of alternative designs
- The **political debate** on CBAM – as an integral part of the “Fit for 55” package under the European Green Deal – has revealed **heterogeneous preferences** among key stakeholders
- Building on a **multi-criteria analysis** and extensive **consultations** with stakeholders in the EU and abroad, the latest ERCST report proposes a **CBAM design** that **balances tradeoffs** and remains **technically, legally** and **politically viable**

<b>Coverage of Trade Flows</b>	During the pilot phase, the proposed CBAM covers imports, with leakage related to exports addressed separately through continued, but declining free allocation to European producers for both domestically consumed and exported products
<b>Policy Mechanism</b>	It could extend the ETS to imports, but have imports dealing in a virtual pool of allowances
<b>Geographic Scope</b>	The only national exemptions from the coverage of the proposed CBAM are for least developed countries, small island developing states, and states with whom the EU has linked emissions trading systems.
<b>Sectoral Scope</b>	Cover any sectors, sub-sectors identified at risk of leakage under ETS As well: Any sectors at risk of leakage due to carbon costs in input goods (Scope 3)
<b>Emissions Scope</b>	During the pilot phase, the proposed CBAM covers direct (Scope 1) emissions and indirect (Scope 3) emissions embedded in raw material inputs that are themselves covered products.
<b>Determination of Embedded Emissions</b>	Default emissions intensity for importers: global sectoral average Possibility for more than one sectoral benchmark, based on production method Importers can challenge the default with third-party verified data
<b>Calculation of the Charge</b>	Product of: <ul style="list-style-type: none"> <li>• Global average intensity</li> <li>• Difference between the price of EUAs and an explicit carbon price in the exporting jurisdiction</li> <li>• Factor that reflects the amount of free allocation received by EU producers</li> <li>• Where no explicit price of carbon in exporting jurisdiction: cost of carbon based on a negotiated agreement between the EU and the country of origin</li> </ul>
<b>Use of Revenue</b>	Revenue directed to: <ul style="list-style-type: none"> <li>• Administrative cost</li> <li>• Defraying certification costs for importers</li> <li>• Funding mitigation actions in trade partner countries affected by the CBAM;</li> <li>• Contributing to the EU budget (“Own Resources”)</li> </ul>



## “Red line” issues

- **Indirect emissions and costs:** inclusion of scope 2 & 3 emissions, value chain coverage threshold
- **Exports & Free allocation** (coexistence issue, exports application)
- **Accommodating foreign climate action:** allowing challenges of the default, and including national exemptions

Issue	Leaked proposal
<b>Sectoral scope</b>	<ul style="list-style-type: none"> <li>• Cement, Steel, Electricity, Aluminium + fertilizers (incl. semi-manufactured / more complex goods)</li> <li>• EC can add to list through delegated acts</li> </ul>
<b>Emissions scope</b>	<ul style="list-style-type: none"> <li>• Scope 1 +2 emissions</li> </ul>
<b>Revenues</b>	<ul style="list-style-type: none"> <li>• EU budget</li> </ul>
<b>Adjustment to EU Carbon Leakage System</b>	<ul style="list-style-type: none"> <li>• Confusing: CBAM = alternative BUT Free allocation is maintained through a ‘transitional provision’</li> <li>• CBAM only applies for those emissions above the free allocation that domestic producers receive</li> <li>• no language on length of ‘transitional provision’ or whether free allocation is eventually phased out or not – only makes reference to the EU ETS directive</li> </ul>
<b>Export rebates</b>	<ul style="list-style-type: none"> <li>• no export rebates, but Free allocation maintained</li> </ul>

## Compliance mechanism

- Notional ETS – importers have to surrender units each year equal to embedded emissions in their imports
- Unit price = average EU auction price of previous week

## Carbon content assessment of imports

For products:

- actual emissions: formula for direct and indirect emissions at installation level + formula for embedded emissions in semi-manufactured goods ('more complex goods')
- 'default values in case actual emissions cannot be determined' : 2023-2025 average carbon intensity of comparable EU producers, starting 2026: 10% worst-performing installations in EU

For electricity:

- average CO<sub>2</sub> intensity of electricity produced by fossil fuels in the EU
- option to declare actual emissions

## Exclusion

- only countries part of or linked to EU ETS are exempted

## Crediting foreign climate policies

- Only carbon pricing policies are recognized – to be verified by authority – prices paid are deducted from CBAM

## BCA discussion Status – climate diplomacy

- **US overview** – White House carbon neutrality announcements
  - **California** - existing BCA for electricity
  - **New York State** - draft of a Carbon Pricing Proposal containing the BCA provision
- **Joe Biden** Leaders Summit and visit to Europe
- **Canada and the provinces** exploring the potential of a border carbon adjustment
- **UK** - COP 26 and G7 presidencies
- **Ukraine** - adopting EU's *acquis*, potentially considering EU-like CBAM
- **China** remains cautious towards the EU CBAM (trade issues), but est. own ETS
- **Japan** is considering further carbon pricing and BCA
- **WTO** discussions still at relatively early stage

## Various industries

- CBAM should come along with a strong support to the green transition of the EU industries
- Generally as a new measure should be an improvement on CL protection
- Recommendation to consider benchmark applying to imports
- Notional ETS for imported products with free allowances as solution
- Limiting CBAM to scope 1, granting free allowances for exports
- It should only apply to voluntary sectors, without modification of the allocation rules during the testing phase

# The EU ETS

- The EU Emission Trading System (ETS) covers around 40% of EU GHG emissions
- It operates in all EU countries plus Iceland, Liechtenstein and Norway (EEA-EFTA states)
- The ETS limits emissions from around 10,000 installations in the power sector and manufacturing industry, as well as airlines operating between these countries,
- Between 2005-2019 ETS emissions declined by almost 35%, by 10.6% in 2020 alone
- This year ETS carbon price has reached a record high, due to market participants' expectations of more ambitious EU climate policies

EUA (EU ETS) Futures Prices

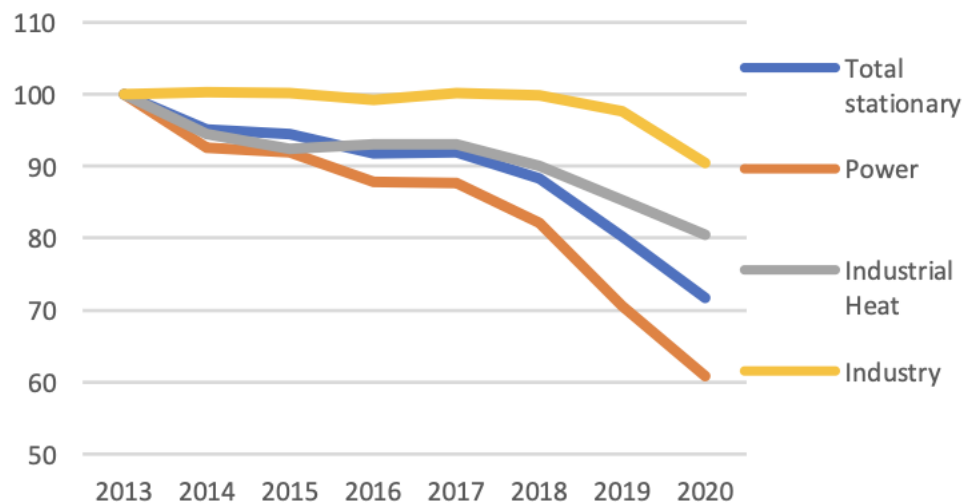


Source: Ember

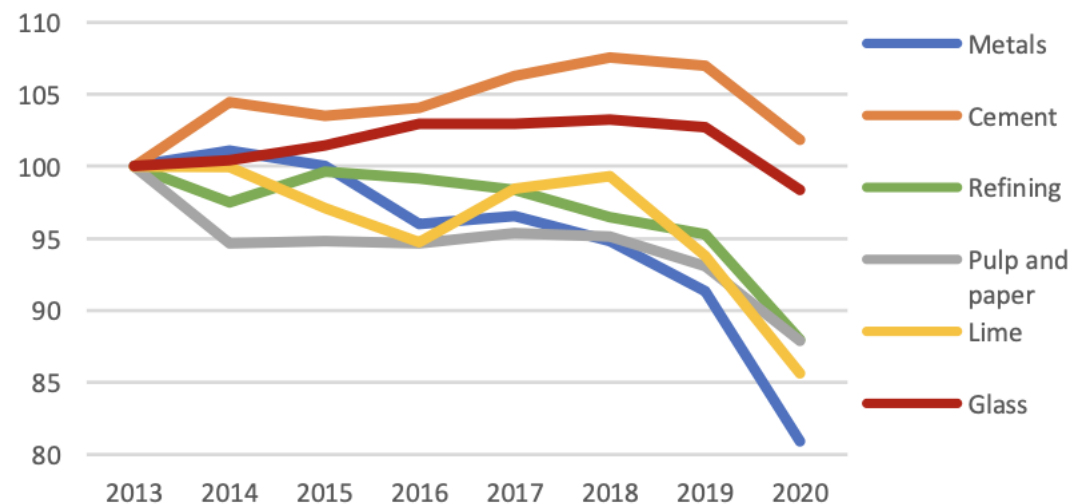
## The ETS Review

- Between **2005-2019 ETS emissions declined by almost 35%, by 10.6% in 2020 alone**
- The power sector has seen its emissions decrease by 45.1%, Industry has reduced its emissions by over 30% since 1990, and over 20% since 2004. However, emissions have mostly **stagnated since 2013** (*at least until 2018*)
- The upcoming review of the EU ETS will have to make the **EU ETS able to achieve 62% emissions reductions** in covered sectors compared to 2005, so as to contribute to the achievement of the -55% overall target.
- The **ETS will move from a a tool to decarbonize the power sector to a tool to decarbonize industry**

*Index of verified emissions*



*Index of verified emissions*



## A tighter cap

- Higher post-2023 Linear Reduction Factor? (now 12% expected to be restored in 2024).
- Possible 100Mt CAP rebasing in 2023
- CBAM & Free Allocation: the challenge of compatibility
- Parameters should ensure a smooth and predictable emissions reduction pathway, which is economically and socially sustainable



# The MSR Review

- Since 2019, the MSR has successfully balances the ETS market
- In the next trading phase, the MSR will likely operate in a more bullish carbon market, with an increased carbon leakage risk
- MSR review will have to consider the impact on competitiveness both of MSR parameters per se and of the dynamic interaction between the MSR and other pieces of the EU climate legislation
- ERCST and BNEF scenario analysis has shown that under a 62% ETS target for 2030, a 12% MSR intake rate post 2024 guarantees a smoother trajectory of EUA prices compared to a 24% MSR
- In the next trading phase we also expect an increase in industry hedging and a decrease in power hedging, which will impact the functioning of the MSR

# ETS Extension

- As part of the review, the Eu Commission is likely to propose an **extension of carbon pricing to three non-ETS sectors, notably maritime, road transport and buildings.**
- While extension to maritime has received green light, extension to road transport and buildings remains a cause of concern
- This would almost **double the emissions coverage of the ETS** and would have the merit of adding liquidity to a market that will inevitably become tighter.
- the extension would also **add to the ETS two sectors with higher abatement costs and lower price elasticity, potentially pushing EUA prices very high**
- Higher fuel and heating prices would severely impact lower income households
- ETS revenues recycling and strong complementary policies addressing non-price sensitive abatement potential could limit the carbon price risk for industry and households.
- At present, the most likely solution is a separate ETS for road transport and buildings

# Flexibility

- As the EU increases its climate ambitions, the ETS cap is slated to rapidly decrease and the total number of allowances to diminish
- Providing installations with with the flexibility to comply with their ETS obligations would help them cope with a tighter market
- International credits would also contribute to the implementation of those cooperative approaches outlined in article 6 of the Paris Agreement
- The Commission has excluded the use of international carbon credits for ETS compliance after 2020. However, this decision could be reconsidered, especially if a robust oversight mechanism is created

# Indirect Costs

- Indirect costs compensation is a growing source of demand for the use of revenues from the EU ETS
- The EU still lack a harmonized system for indirect costs compensation and not all member states currently provide this type of compensation.
- Rising EUA prices and potential widening differences across companies located in different EU member states will call this piecemeal approach into question
- Intra-EU leakage could potentially become an important issue in the future