EU carbon pricing goes global Preparing for the Carbon Border Adjustment Mechanism (CBAM)

Carbon border adjustments An idea whose time has come?



Plugging a gap in action on climate change

Climate change is a global problem, but binding global agreement on tough GHG emission reductions is almost certainly unattainable



Solution? "Nationally Determined Contributions" regime (Paris Agreement)



Countries can set (and meet) demanding NDCs, yet still cause high GHG emissions



Carbon border adjustment is a way for unilateral measures to have global impact

Why economists advocate carbon border adjustments (BCA / CBAM)

Greenhouse gas (GHG) emissions

Economic activity
climate change

- Extractive industries
- Energy consumption in production of goods and services
- Transportation

Carbon pricing

Most effective way to tackle GHG emissions

- Tradeable permits or carbon tax?
- Which emissions should be in scope?
- How best to set / adjust price?
- Need to avoid regressive impacts

Global carbon pricing regime?

Ideal approach, but probably impracticable

- Will not reach agreement on an effective scheme
- Separate national and regional regimes
- But these may redistribute, rather than reduce, overall emissions

Carbon border adjustment (BCA / CBAM)?

Could be a pragmatic way forward

- Same CO₂ price for imports and domestic goods
- Avoid negative impacts of territorial regimes
- May → wider adoption of effective CO₂ pricing globally
- But each country can develop CO₂ pricing at its own pace

Implementing a BCA / CBAM

Some significant challenges

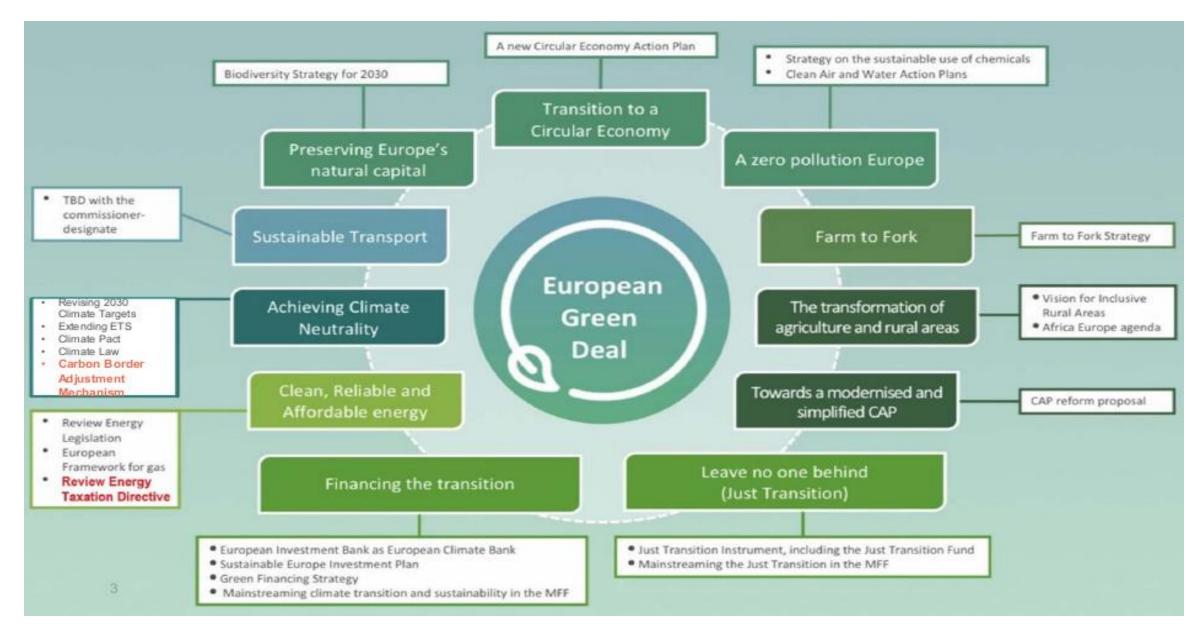
- International trade law controversies
- Other potential legal obstacles
- Practicality of monitoring and enforcement
- Avoiding incentivising unhelpful behaviour on the part of exporters
- Shares (and magnifies) difficulties of national or regional regimes

31/08/2021

Carbon border adjustment mechanism EU legislative and policy context



CBAM in context: overview of the EU Green Deal



Key relevant policies and legislative initiatives

High-level Green Deal climate policy objectives

- EU to be a fair and prosperous society with a modern, resourceefficient and competitive economy
- By 2050: Europe to be the first climate-neutral continent
- By 2030: reduce EU CO₂ emissions by 55% (from 1990 level)

Key EU decarbonisation priorities

- EU energy intensive industry needs to make substantial investments in new plant in order to reduce emissions
- Impacts of (successful) EU policies: risk of carbon leakage
- Green recovery / just transition

Relevant legislative initiatives

- "EU Climate Law": sets EU emissions targets
- EU ETS (carbon pricing regime): proposed expansion / reform
- Energy Taxation Directive: proposed reform
- Carbon Border Adjustment Mechanism (CBAM)

EU Emissions Trading System: some key features

Covers all of EEA (EU + Norway, Iceland, Liechtenstein); mostly CO₂, some N₂O and perfluorocarbons

Applies to c.11,000 installations in specified "heavy" industries + 600 aircraft operators flying to / from EEA

A "cap and trade" scheme: cap set at EU level and reduces annually at steady rate

Surrender 1 EU allowance per tCO₂e emitted or face heavy financial penalty

EU-wide auction process to purchase allowances (revenues → Member States: c. € 14 billion)

Free allocation of allowances for emitters in some sectors

EU Emissions Trading System: evolution to date

Phase 1: 2005-2007

Phase 2: 2008-2012

Phase 3: 2013-2020

Phase 4: 2021-2030



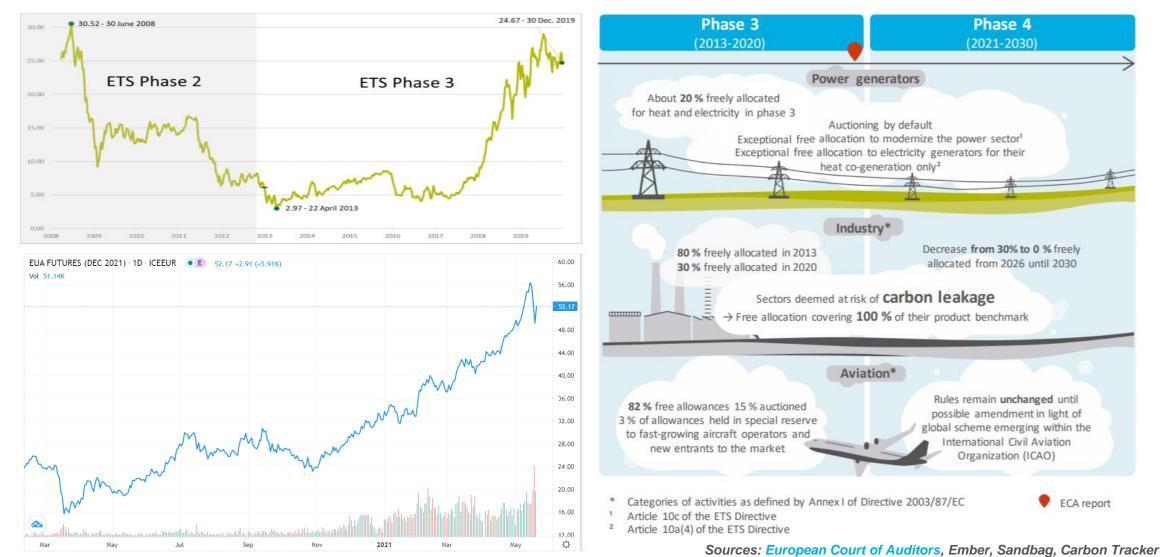
Fewer allowances allocated free, on a more targeted basis, and subject to benchmarking

Market Stability Reserve
(and "shelf life" for
allowances) introduced to
deal with problem of
"surplus" allowances

Phase 4: Member States can include additional sectors and exclude small emitters

Key question now: how to adapt EU ETS to hit revised 2030 GHG emissions reduction target (increased from 40% to 55% on 1990 levels)

EU Emissions Trading System: some developments



EU CBAM

Likely shape of proposals and path to implementation



Development of EU CBAM policy: key milestones

2009, 2016

French
government
"non-papers"
explore
possible
CBAMs within
EU ETS

December 2019

Commission
Communication
on the Green
Deal

March 2020

Inception Impact Assessment

July-October 2020

Open Public Consultation

March 2021

European Parliament Resolution

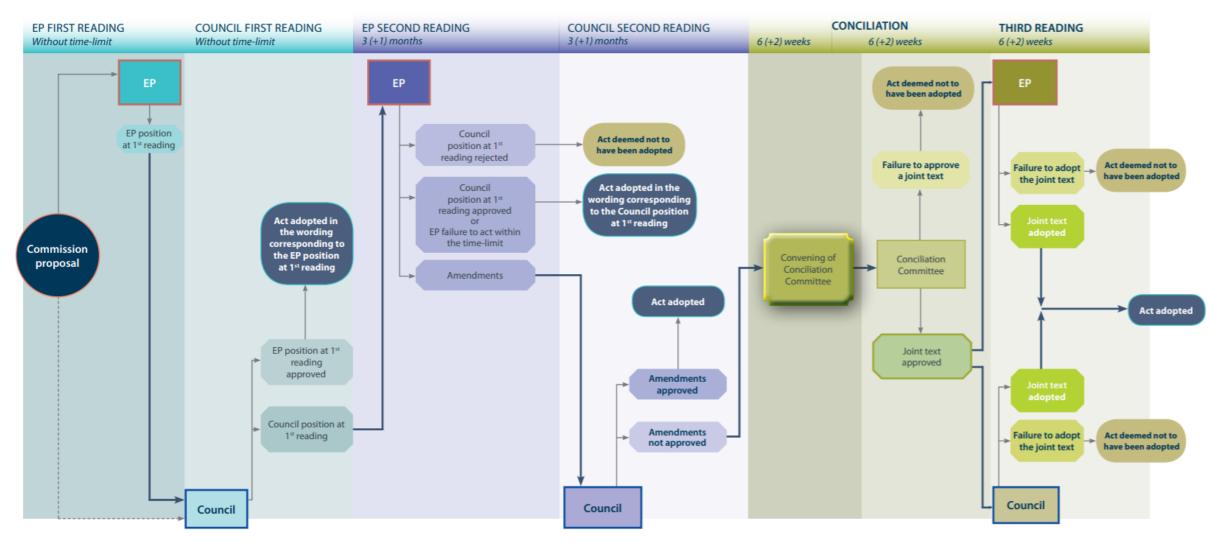
July 2021

Commission to publish legislative proposal

2023

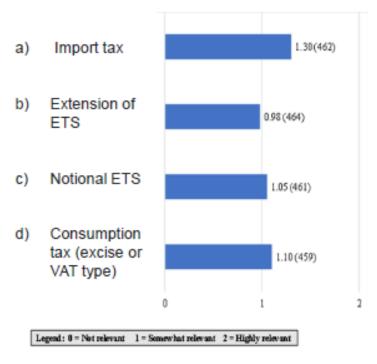
CBAM to enter info force

Summary of EU "ordinary legislative procedure"

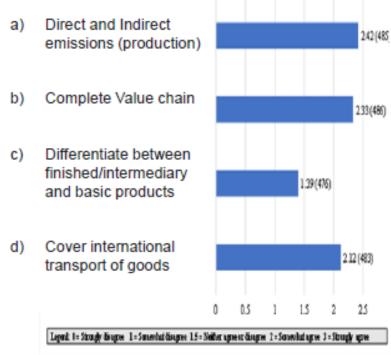


Open public consultation: feedback on CBAM design options and coverage

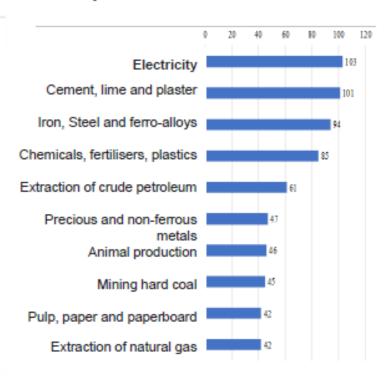
Design Options



Scope of Emissions



Top 10 Sectors



European Parliament resolution (March 2021): Key points (1)

Justification for an EU CBAM

- EU's increased climate ambition should not lead to carbon leakage
- Importance of taking full-lifecycle approach to CO₂ emissions
- Net imports into EU represent 20% of EU's domestic CO₂ emissions
- · Trade as tool of sustainable development, EU as global standard setter
- Expectation of positive response from US

Climate change mitigation, not protectionism

- Designed exclusively to advance climate objectives
- Should not enhance protectionism, unjustifiable discrimination or restrictions
- · Not a substitute for other policies (e.g. low carbon subsidies & standards)
- Minimise risk of circumvention (re-routing, exporting semi-finished goods)

CBAM to be based on reformed EU ETS

- Separate pool of EU allowances for importers; pricing to reflect EU ETS price
- Cover all products / commodities in EU ETS (including when embedded)
- Start with power sector and energy intensive sectors (cement, steel, aluminium, refineries, paper, glass, chemicals, fertilisers (94% of EU industrial emissions)
- Carbon embedded in logged wood and depleted soil should have a price

European Parliament resolution (March 2021): Key points (2)

"Trade-related aspects"

- EU trade policy to be consistent with Paris Agreement / help to achieve its goals
- CBAM can be GATT-compliant if it only pursues environmental aims
- · Global action should make CBAM redundant
- Commission to initiate WTO / G20 negotiations: update GATT for climate crisis
- Export rebates: only if WTO compatible and have positive climate impact

Use of proceeds

- Revenues from CBAM (? €5-14 billion): a new "own resource" for Commission
- · CBAM should not be treated as a cash-machine
- Revenues should support Green Deal (just transition, EU decarbonisation)
- Increased finance for Least Developed Countries and Small Island States
- Reduce some pressure on Member States to fund EU programmes

Implementation

- · Commission should design CBAM with a clear and ambitious timeline
- Need to evaluate impact on SMEs and possibly provide support for them
- Most climate-friendly materials should not suffer competitive disadvantages

CBAM design and implementation challenges (1): calculating how much importers should pay

Potential volatility of market-based EU carbon price

Complexity of the EU carbon price: free allocation of allowances

Comparison with exporter jurisdiction: explicit carbon prices

Comparison with exporter jurisdiction: effective / implicit carbon prices

Individual adjustment mechanism (IAM) for exporters who "beat the average" for their jurisdiction? Supply chain traceability (carbon content); robustness of data and verification processes

CBAM design and implementation challenges (2): avoiding unintended consequences

Differentiation

- Take account of actual emissions to encourage greener exporters (IAM)
- Green output → EU; "dirty" plants' → rest of world: no climate gain?
- Even with IAM, selling to non-EU importers is more profitable
- → A form of carbon leakage (if those other markets have no CBAM)?

Scope

- Practicability

 (initial) narrow / shallow scope
- But (1) choice of narrow scope likely to be arbitrary; (2) less impact
- So go for wider / deeper scope?
- Impact should be greater, but complexity increases more?

Impact on EU industry

- EU exports become more expensive / may be shunned by some buyers
- → More emissions globally
- Export rebate?
 Trade law difficulties