

The Fit for 55 Package

Overview of some specific results



When the FF55 was adopted by the EU Commission on 14 July 2021

The objective was to achieve “at least” 55 % of reduction by 2030 compared to 1990 levels.

- **Our expectations :**
 - Ensuring that the pack include the right enablers to incentivise investment in renewable and low carbon fuels production in the EU
 - Existing assets to remain competitive throughout the transition (adequate level of protection against the risk of carbon leakage)
- **Our inputs :**
 - Contribution to the elaboration of the Masterplan for a competitive transformation of EU energy-intensive industries enabling a climate-neutral, circular economy by 2050
 - Our feedback to the key elements of the FF55 (published on the FuelsEurope and the EC web site)

State of Play for

- ETS1
- ETS2
- Carbon Border Adjustment Mechanism (CBAM)
- FuelEU Maritime regulation
- ReFuelEU Aviation regulation
- Renewable Energy Directive – RED (III)
 - *Transport*
 - *Industry*
- Evolution of Low Emission Fuel Standards for LD/HD vehicles

Emissions Trading System (ETS 1)

Final deal: Highlights and cap trajectory

Highlights :

- - 62% in 2030 vs 1990
- Inclusion of maritime emissions
- Carbon leakage protection conditionalities
- Phase out of free allowances for CBAM goods as from 2026

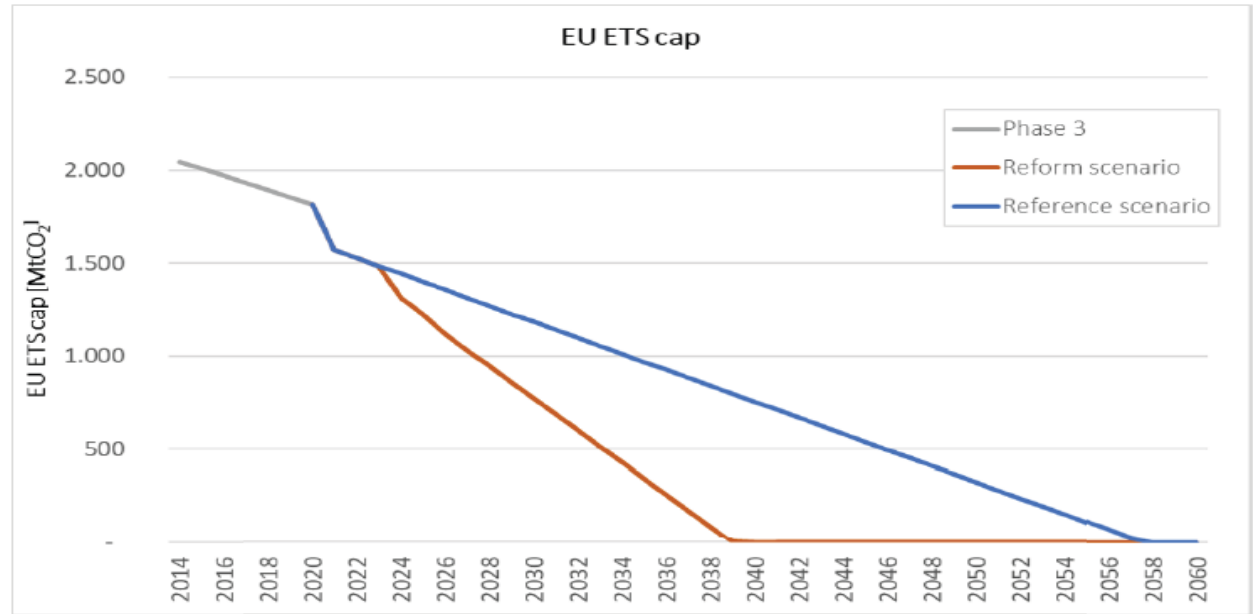


Figure 1: Cap in Reform scenario (adjusted to sectoral scope of LIMES-EU)

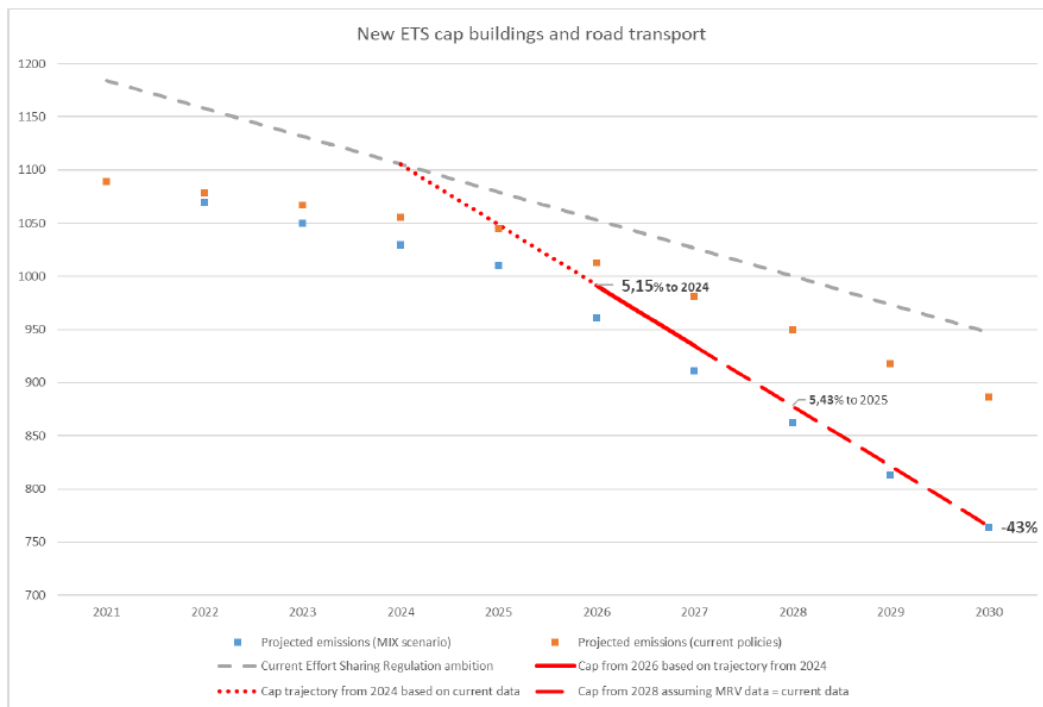
Pahle M., Günther C., Osorio Simon S., Quemin S., *The Emerging Endgame: The EU ETS on the Road Towards Climate Neutrality*, Feb 2023

Emissions Trading System for Road Transport and Buildings (ETS2)

Final deal: Highlights and ETS2 cap trajectory

Highlights :

- - 43% in 2030 vs 1990
- Delayed start (2027)
- Price adjustment mechanism
- Derogation for regulated entities in MS having a carbon pricing system in place



Source: Calculations of Commission services

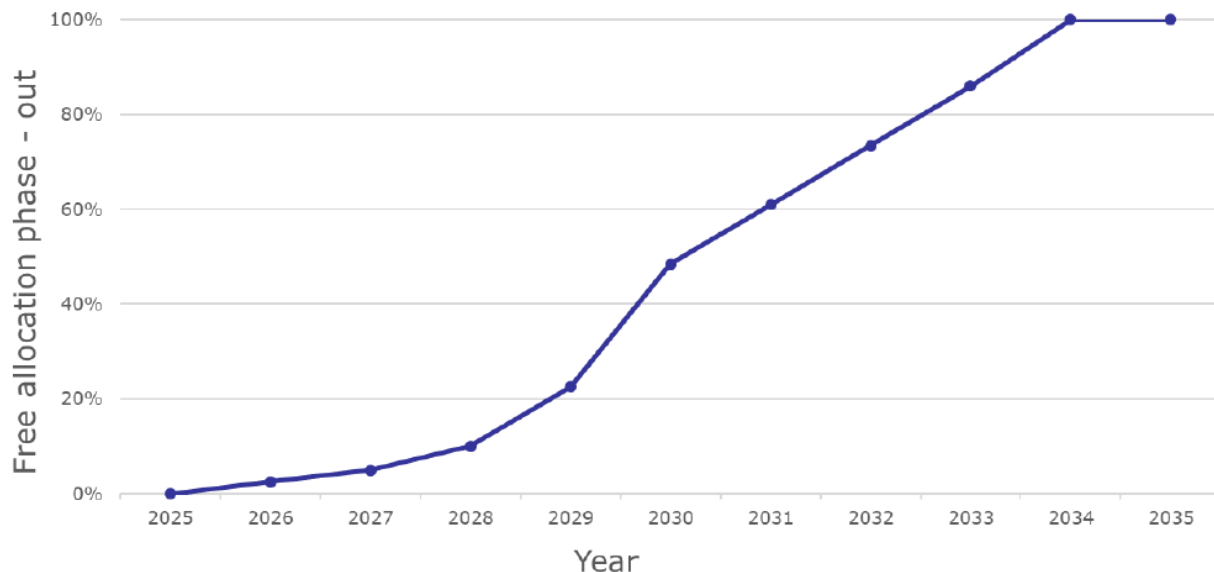
Carbon Border Adjustment Mechanism (CBAM)

Final deal: highlights and free allocation phase-out

Highlights :

- Start in 2026
- Cement, steel, aluminium, fertilisers, H2 and electricity
- Extension via review
- No export adjustment mechanism from the start (subject to review)

Free allocation phase-out in CBAM sectors



FuelEU Maritime

FuelEU Maritime regulation– Highlights

Key Parameters

New Regulation

Purpose

Well-to-Wake Low Carbon Fuel Standard targeting GHG emissions reduction vs. 91.16 gCO₂/MJ

Container and passenger ships to use On-shore Power Supply at berth in major EU ports from 2030, extended to the rest of EU ports as of 2035, if these ports have an on-shore power supply.

Obligated parties

Ship owners, ships above 5,000 GT, pooling flexibility

Eligible fuels

Renewable & low carbon fuels : biofuels (non-food non-feed crops), biogas, RNFBO and recycled carbon fuels

RFNBO (Sunrise)

Rewarding factor of 2 from 2025-34 . Potential sub-mandate of 2%en for RFNBO or 'equivalent' [-70% GHG] from 2034 if RFNBOs are less than 1%en by 2031 and less than 2%en in 2033

Scope

100% GHG emissions within EU, 50% during extra-EU voyages. Exemptions for EU outermost regions and highly dependent areas

GHG

CO₂, CH₄ and N₂O. 100-year Global Warming Potential. Possibility to consider additional elements in future, incl. Black Carbon

Emission values

Companies entitled to diverge from the default values* under a scheme recognized by EU Commission

Penalties (Buy-out)

1. Equivalent to 2400€/t of VLSFO for emissions above targets 2. Based on price differential for RFNBO sub-mandate 3. Based on non-compliant power demand at berth with 1.5 EUR/kWh



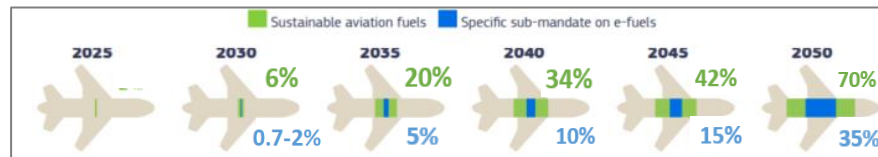
ReFuelEU Aviation

ReFuelEU Aviation regulation* – Highlights

Key Parameters

New Regulation

SAF and eSAF volume mandates**



Purpose

Yearly quantity of aviation fuel uplifted by aircraft operators (at a given Union airport) 90% of the yearly aviation fuel required (amount necessary to operate commercial flights departing from a given Union airport)

Obligated parties

Fuel suppliers and aircraft operators

SAF qualification

RED compliant biofuels, RFNBO and RCF; synthetic low carbon aviation fuels, RFNBO H2 only as fuel (not as intermediate), biomass co-processing.

Feedstock eligibility

Exclusion of food and feed crops, intermediate crops, palm fatty acid, palm oils and soy-derived materials as well as soap stocks and its derivatives. Exclusions shall not apply to feedstocks that are or will be listed in Annex IX. 3% cap on non-annex IX.

Transitional period

During 10 year period (until YE2034), suppliers may supply the minimum share of SAF as a weighted average across Union airports.

Book & Claim

EU Commission **report in 2024** for potential modification of the SAF flexibility mechanism, incl. system of tradability of SAF

Reporting

Incl. reporting by fuel suppliers of non-CO2 climate-related aspects of the fuel supplied per batch, per union airport at union level

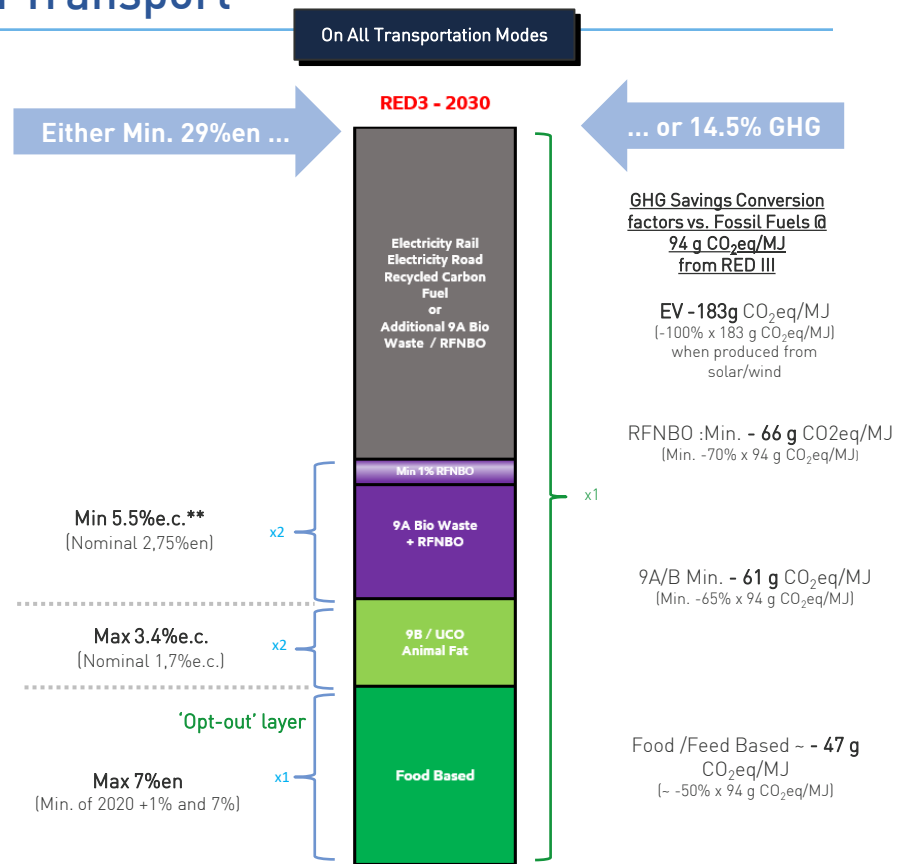
Penalty

Suppliers: at least twice as high as the average price differences between conventional aviation fuel and SAF/eSAF per ton for non-compliant quantity and obligation to provide shortfall in year N+1
Airlines: fine at least twice as high as the yearly average price of aviation fuel per ton for non-tanked quantity

RED II(I) – Transport

Renewable Energy Directive* – RED II(I) in Transport

- Purpose: revised 2030 target of 42.5-45% of renewables in EU energy mix. Extension beyond power generation and transport to industry and building
- Obligated party: Member States (transposition incl. obligation)
- RED III Transport: all modes in scope with challenging overall targets
 - either Min. 29%e.c. ('energy content' with eventual multipliers)
 - or Min. 14.5% GHG emissions savings (CI vs. benchmarks – no multipliers)
- Advanced Biofuels (9A) /RBNBO sub-mandate: 5.5%en after double counting incl. sub-mandate of Min. 1% from RFNBOs.
- Annex 9B biofuels cap: 3.4%e.c. after double counting
- Crop-based cap: 7%e.c with 'opt-out' possibility
- 'Free' zone (grey): electrification / RCF / additional advanced biofuels and RFNBOs eligible to bridge with overall obligation
- Secondary legislation: important RED II(I) delegated regulations enacted
 - ✓ DA on Additionality of electricity for RFNBO production
 - ✓ DA on GHG methodology for production of RFNBO/ RCF
 - ✓ DA on GHG methodology for co-processing of biomass with fossil fuels
- Outstanding considerations for investors:
 - Consistency of transposition across 27 Member States in 18-months ?
 - Mandate articulation / visibility - buyout or penalty levels ?
 - ReFuelEU Aviation / FuelEU Maritime obligations in RED3 local mandates ?
 - Voluntary Schemes certification of RFNBO / RCF / Co-processing / Imports ?
 - Pending revision of Annex 9 A/B
 - Articulation with new ETS 2 and ETS1 for aviation - CBAM - ETD



RED II(I) – Industry

Renewable Energy Directive* – RED II(I) - Industry

RED-Industrial Target

- Increase the share of renewable sources in industry sector by an indicative 1.6 percentage points as an annual average calculated for the periods 2021 to 2025 and 2026 to 2030.
- Gradual target: 42% in 2030 - 60% by 2035
- Requires that the EC develops a Union strategy for imported and domestic hydrogen
- H2 as by-product & used to produce biofuels excluded from the scope
- Member States will be able to discount 20% of the RFNBO target under two conditions
 - Contribution to the binding overall EU target meets the MS expected contribution
 - H2 share from fossil fuels consumed is no more than 23% in 2030 and 20% in 2035

Evolution of Low Emission Fuel Standards for LD/HD vehicles

CO2 standards in LDVs: the EU agreement

- Adopted on 19 April 2023.
- With Regulation (EU) 2023/851, The EU became *the first major region worldwide to introduce a fleet CO2 tailpipe emission target of 0 g/km for all cars and vans newly registered from 2035 onwards.*
- *No recognition for LCFs.*

Last minute bilateral agreement between Commission and Council:

The Commission shall, by autumn 2023, prepare a Delegated Act for the possibility to register, even after 2035, the vehicles fuelled **exclusively by CO2-neutral fuels**. In further exchanges, such fuels were indicated as corresponding to RFNBO (i.e.: biofuels are not included).

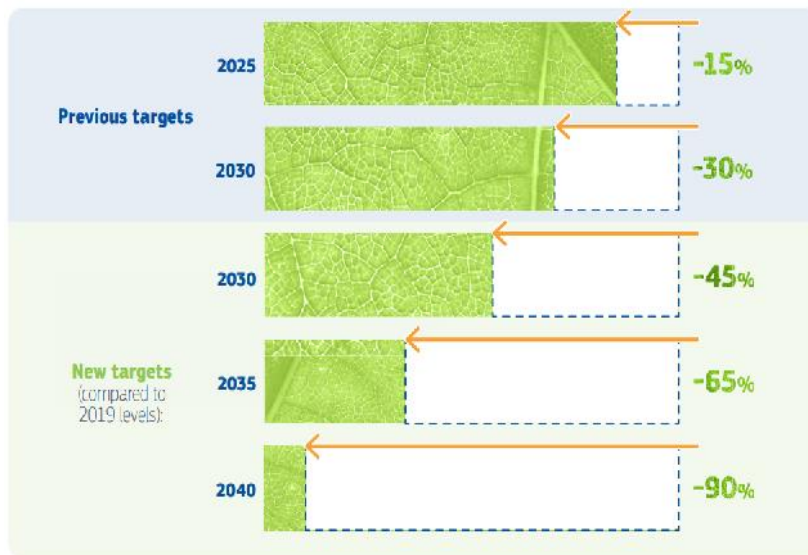
CO2 Emission targets	2025 - 2029	2030 - 2034	2035 - onwards
Cars	- 15%	- 55%	- 100%
Vans	- 15%	- 50%	-100%

The annual specific emission targets of each manufacturer are based on these EU fleet-wide targets, taking into account the average mass of its newly registered vehicles.

CO2 emission performance standards for HDV – the proposal at glance

- Scope covers : trucks (above 5 tonnes), urban buses and long-distance buses, trailers (unpowered vehicle towed by a motor vehicle), tractors, coaches and lorries . 90% of heavy-duty sales in EU.
 - vehicles for civil protection, fire services, forces responsible for public order are not subject to the CO2 targets

CO₂ emissions reduction targets for HDV



New **city buses** will be zero-emission by 2030.

Conclusion

Where do we stand when most of the FF55 elements have gone through the co-legislative process (October 2023) ?

- The pack should deliver more than initially expected (between -57 and 58%)
- How all elements will work all together remains to be analysed and carefully impact assessed in order to conclude on whether it meets our initial expectations
- Many secondary legislative acts to be adopted to make the pack implementable : they deserve an impact assessment and will also trigger the need for a deep analysis
- The 2040 target should be included in the climate law in 2024, which means ...
- ... another FF XX by 2040 pack to be proposed by the EC (2025-2026) and adopted by the co-legislators even before the end of the decade : legal certainty, visibility for business cases?

Back up slides

ETS 1 - summary of final deal (1/2)

FINAL DEAL	
Starting date	<ul style="list-style-type: none">• 1 January 2024
Ambition	<ul style="list-style-type: none">• -62% emissions by 2030 compared to 2005• Two-step rebasing: -90 million allowances in 2024 & -27 million allowances in 2026 (=117 millions)
Linear Reduction Factor	<ul style="list-style-type: none">• 4.3% in 2024 – 2027; 4.4% from 2028
Benchmark annual update rate	<ul style="list-style-type: none">• Maximum from 1.6% to 2.5% from 2026; Minimum from 0.2% to 0.3%;
Scope changes	<ul style="list-style-type: none">• Inclusion of hydrogen and syngas, with a threshold of 5 t/d
Market Stability Reserve	<ul style="list-style-type: none">• Intake rate: 24% until 2030• Thresholds of the reserve: 833M/1096M allowances• Threshold of invalidation: 400M allowances
Cross-Sectoral Correction Factor	<ul style="list-style-type: none">• Exemption for the 10% best performers
Conditionality	<ul style="list-style-type: none">• Conditionality on Energy Efficiency: possible loss of 20% free allocation• 20% installations with the highest emissions to establish Climate Neutrality Plans by May 2024: possible loss of 20% free allocation
Compliance cycle calendar	<ul style="list-style-type: none">• Deadline to grant free allocation postponed from 28 February to 30 June• Deadline to surrender allowances postponed from 30 April to 30 September

ETS 1 - summary of final deal (2/2)

FINAL DEAL

Phase-in CBAM/Phase-out FA	<ul style="list-style-type: none">• Gradual phase-out of free allowances from 2026 to 2034 in parallel to gradual phase-in of CBAM for the six sectors concerned
Export review clause	<ul style="list-style-type: none">• By 31 December 2024 the Commission shall assess the carbon leakage risk for CBAM goods exported to third countries and if appropriate submit a legislative proposal to address it
ETS Aviation	<ul style="list-style-type: none">• Obligated parties: aircraft operators• Linear Reduction Factor: 4.3% from 2024 to 2027 and 4.4% from 2028• Maximum 20m allowances of the total quantity of allowances allocated in respect of aircraft operators reserved until 2030 to uplift sustainable aviation fuels
ETS Maritime	<ul style="list-style-type: none">• Obligated parties: shipping companies• Surrendering of allowances for 40% of emissions of 2024, 70% of emissions of 2025 and 100% of emissions of 2026• Geographical scope: 100% intra-EU, and 50% extra-EU voyages, in combination with a IMO review clause• Methane and nitrous oxide emissions from 1 January 2026

Latest update on the ETS 1 - implementing process

Q3 – Q4 2023

- Delegated Act on the operation of the Innovation Fund (revision of Regulation 2019/856) - Adopted ✓
- Implementing act on the Content and format of climate neutrality plans (new act)
- Rules for harmonised free allocation (Revision of existing Commission Regulation 2019/331)
- Implementing Act to update the rules for monitoring and reporting (revision of implementing Regulation 2018/2066)

2024

- Implementing Regulation on verification of data and accreditation of verifiers (revision of existing Regulation 2018/2067)
- Implementing act determining revised benchmark values for 2026-2030 (revision of existing Regulation 2021/447)

2025

- Implementing act on adjustments to free allocation due to activity level changes (revision of existing Regulation 2019/1842)

Further acts

- Delegated act on requirements to consider that greenhouse gases have become permanently chemically bound in a product (new)
- Implementing act on how to account for emissions from renewable fuels of non-biological origin and recycled carbon fuels (new)

ETS 2 - Summary of final deal

FINAL DEAL

Starting date	<ul style="list-style-type: none">• Auctioning of allowances from 2027• Possible postponement in case of high energy prices
Ambition	<ul style="list-style-type: none">• -43% emissions by 2030 compared to 2005
Linear Reduction Factor	<ul style="list-style-type: none">• 5.15% until 2027; 5.38% from 2028
Applicable derogations	<ul style="list-style-type: none">• Until 2030 derogation for regulated entities established in a MS where carbon tax in force for the years 2027-2030, provided that the carbon tax has been notified and its rate is higher than the average auction clearing price of emissions permits.
Price adjustment mechanism	<ul style="list-style-type: none">• Price adjustment mechanism in case of high energy prices through release of allowances from the MSR
Review and integration with ETS1	<ul style="list-style-type: none">• By 1 January 2028, the Commission should report to the EP and to the Council on the effectiveness, administration and practical application of the mechanism and, where appropriate, propose to amend the mechanism;• By 31 October 2031 the Commission should assess the feasibility of integrating the sectors covered by ETS2 in ETS1.

Latest update on the ETS 2 - implementing process

2023

- ETS2 part of Monitoring and Reporting Regulation
- ETS2 part of Auctioning Regulation
- ETS2 part of Registry Regulation

Further acts

- Rules for avoiding double counting and providing necessary financial compensation
- ETS2 part of Accreditation and Verification Regulation
- Reporting of levels of cost pass through

- **Complex implementation**
 - Reality of fuel distribution chain complex
 - Often no information available on the end use of the fuel

Summary of CBAM final deal

FINAL DEAL	
Starting date	<ul style="list-style-type: none">• Transitional period: 1 October 2023 – 2025 (reporting obligations only)• Full implementation from 2026
Scope	<ul style="list-style-type: none">• Cement, Iron, Steel, Fertilizers, Hydrogen, Electricity• Some precursors and a limited number of downstream products• After transition period time-line for inclusion of other products• Direct emissions for all sectors, indirect emissions for sectors not eligible for indirect costs compensation (cement and fertilizers)• New assessment by end 2025 for possible inclusion of other indirect emissions
Phase-in CBAM/ Phase-out FA	<ul style="list-style-type: none">• CBAM to be gradually phased-in, at the same pace that EU ETS free allowances in sectors covered by the CBAM are phased-out with the following timeline: 97,5% in 2026; 95% in 2027; 90% in 2028; 77,5% in 2029; 51,5% in 2030; 39% in 2031; 26,5% in 2032; 14% in 2033; 0% in 2034
Review and carbon leakage risk	<ul style="list-style-type: none">• Every two years from the end of the transitional period the Commission shall assess CBAM effectiveness in addressing the carbon leakage

Review process: CBAM scope extension

- CBAM Regulation, Art. 30.2 (a) and (b): **Before the end of the transitional period**, the Commission shall present to the Parliament and the Council a report assessing the possibility to the extend the CBAM scope (...) and the criteria to identify goods to be included based on the sectors at risk of carbon leakage.
- Methodology needed to assess the carbon embedded in imported goods:
 - Methodology for refinery products requires close cooperation with our sector due to peculiarity of the sector.
 - Technical constraints due to specificity of the refinery industry: not possible to directly assign greenhouse gas emissions to individual output products.
 - The relevant ETS benchmark does not directly correspond to specific products, but to all the refinery output.

Latest update on the CBAM implementing process

Q3 – 2023

- Implementing Act on rules for reporting obligations during the transitional period: adopted ✓
- Implementing Act on Reporting Obligations
- Implementing Act on Reporting Infrastructure

Q3 – 2024

- Delegated Act on the accreditation of verifiers (Art. 18(1))
- Implementing Act on the Authorisation of declarants (Art. 5 and Art. 17)
- Implementing Act on the process of verification of embedded emissions (Art. 8(3))
- Implementing Act on CBAM registry (art 14)

Q2 – 2025

- Implementing Act on calculation of embedded emissions (Art. 7(6))
- Implementing Act on the format and other elements of the CBAM declaration (Art. 6(6))
- Implementing Act on the conversion of the average yearly carbon price in a third country (Art. 9(4))
- Implementing Act on the calculation of the price of CBAM certificates (Art. 21(3))
- Implementing Act on Indirect emissions (Annex IV)
- Implementing Act on geographical circumvention (Art. 2(2))

Thank you for your attention

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