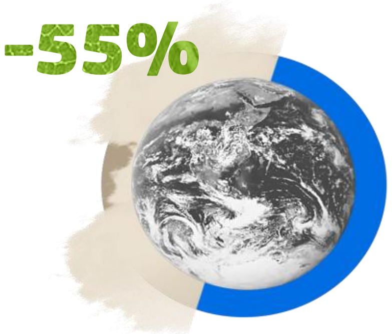
# Delivering our 2030 climate target:

## EU ETS as a key driver for emissions reductions

# EU ETS pillars




## Content

- EU ETS overview and its role within the economy
- EU ETS key features
- Auctioning, free allocation and the Union registry
- Monitoring, reporting and verification (MRV)

# EU ETS overview

## and its role within the economy

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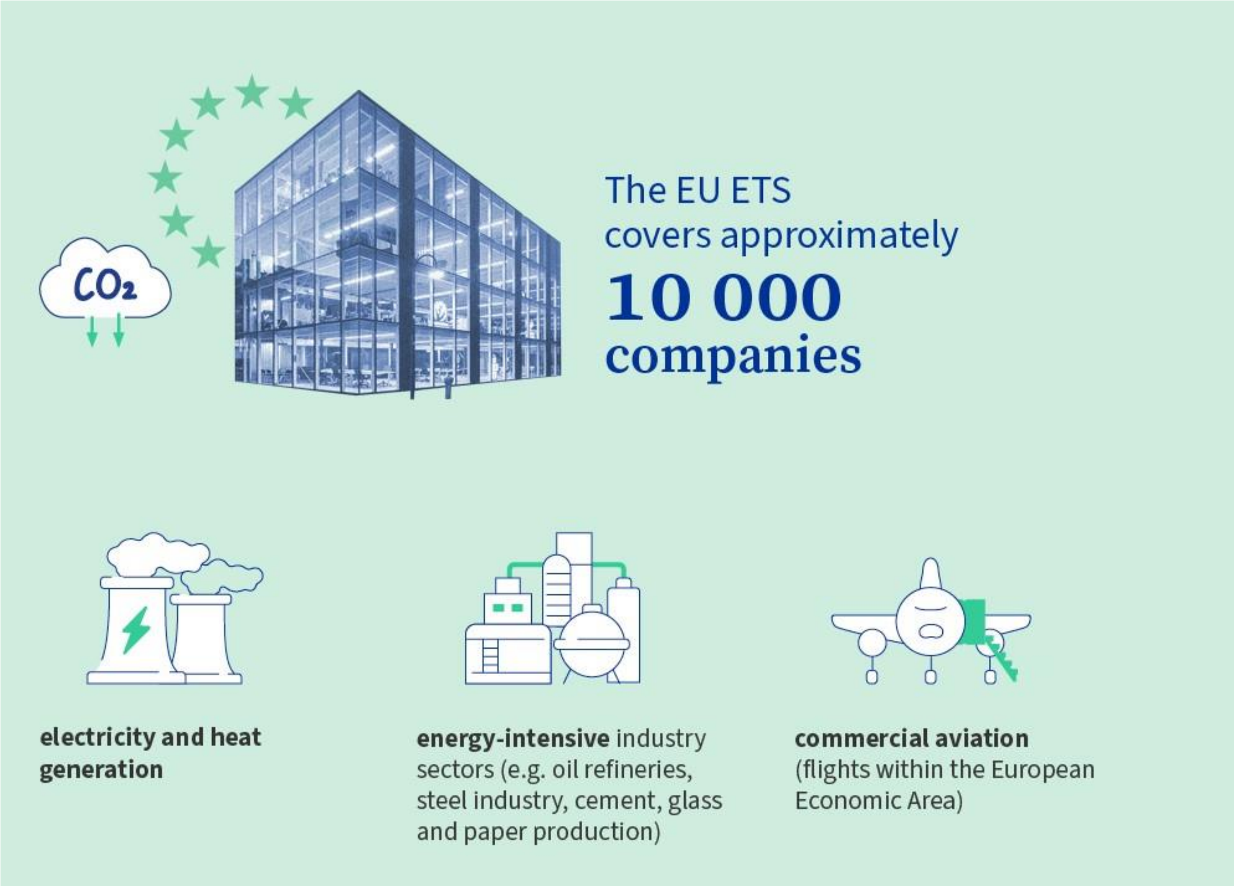
# World's first major carbon market


- Started in 2005 and works on the basis of the **'cap and trade'** principle
  - A cap is set on the total covered emissions and reduced yearly by a percentage (linear reduction factor)
  - Companies receive or buy emission allowances which they can trade with one another as needed
- Operates in **30 countries** (all 27 EU countries plus Iceland, Liechtenstein and Norway)
- **Together around 40% of total EU emissions.**
- Since 2005, EU-ETS covered **emissions down by almost 35%.**
- A robust carbon price improves **profit margins for clean production** and **promotes investment** in innovative, low-carbon technologies: **today of around €90/tonne $CO_2$**

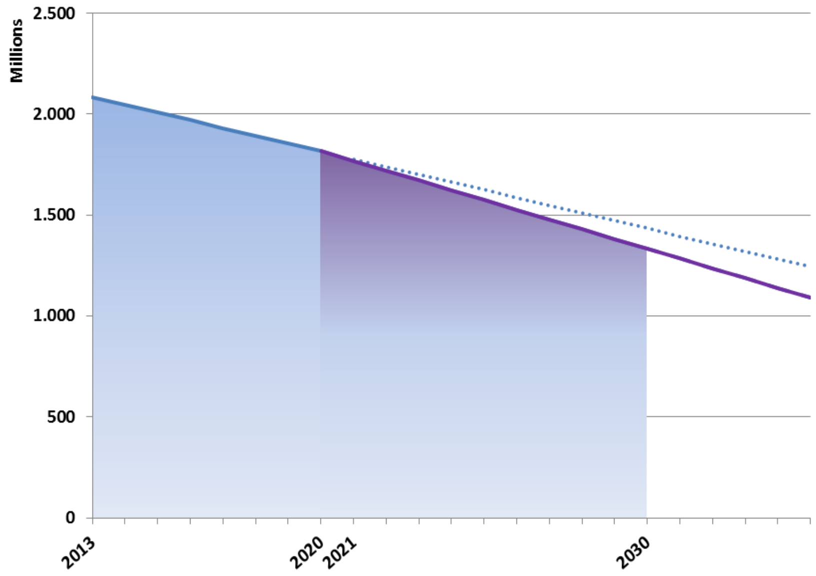
# Coverage of the EU ETS




- Combustion units **larger than 20 MW** are covered ('rated thermal input' in the form of fuels). EU Member States can opt-in smaller installations.
- Aviation and maritime
- Not only $\mathbf{CO_2}$ is covered, also nitrous oxide ($\mathbf{N_2O}$) from production of nitric, adipic and glyoxylic acids and glyoxal perfluorocarbons (**PFCs**) from aluminium production

# Key features

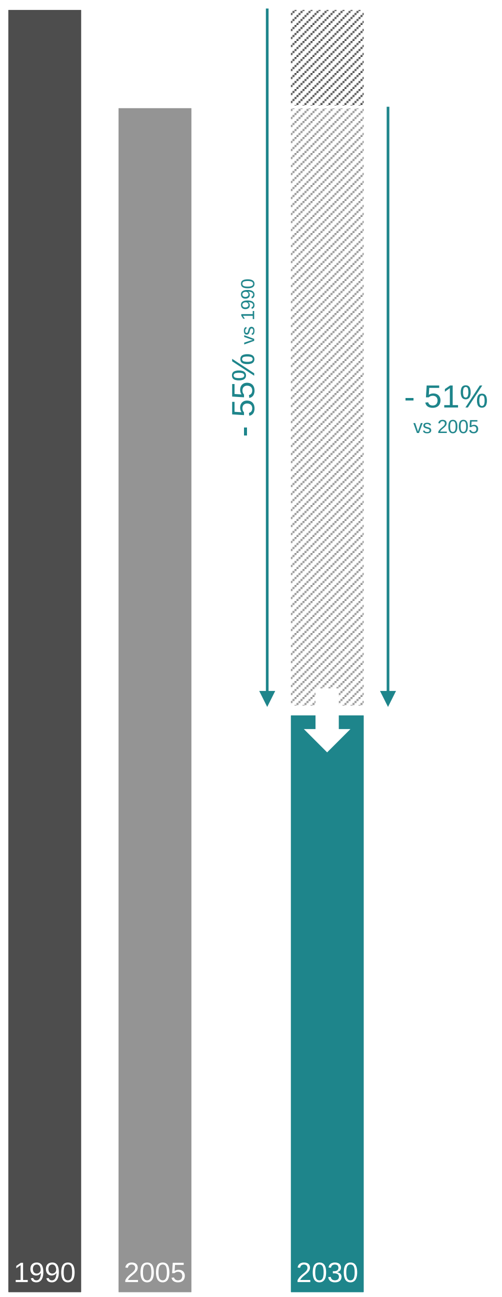
- Emissions limitation is most important element, and EU ETS has an annual reduction of the total cap since 2013
- Robust harmonised monitoring, reporting and verification rules ensure credibility of system
- Member States ensure virtually 100% compliance, backed by harmonised €100/ tonne penalties
- Electronic registry administered by Commission




- Allowances (classified as financial instruments) are made available through **2 means**:
  - Auctioning (57% of total)
  - Free allocation (43% of total)

# How ETS, ESR and LULUCF relate to FF55 (and each other)

100 Mt $CO_2e$




Emissions Trading Systems 1 & 2 — Effort Sharing Regulation — Land Use, Land Use Change & Forestry Regulation — Fit for 55% net GHG reductions until 2030

## ETS1

- 62%
vs 2005

~ 8.65 Mt / year

86.5 Mt $CO_2e$

cumulative maximum flexibility 2021-2030

## ESR

- 40%
vs 2005

## ETS2

- 42%
vs 2005

full flexibility

~ 26.2 Mt / year

262 Mt $CO_2e$

cumulative maximum flexibility 2021-2030

(two phases with maximum 131 Mt)

## LULUCF

emissions

vs 2016-18 average: - 42 Mt $CO_2e$; - 15%

removals

Covers emissions from:

**ETS1** ($CO_2$)

- fuel combustion > 20MW (power, centralized heat, industry)
- energy intensive industry (+ PFCs, $N_2O$)
- aviation (intra-EU)
- maritime transport (intra-EU + 50% extra-EU, only intra-EU covered by EU target) (+ $CH_4$, $N_2O$)

**ESR** ($CO_2$, $CH_4$, $N_2O$, HFCs, PFCs, $NF_3$, $SF_6$)

- agriculture
- rail and other transport
- waste
- industrial processes & product use (non-ETS1)

+

**ETS2** ($CO_2$)

- fossil fuel combustion for buildings, road transport, non-ETS1 industry

**LULUCF** ($CO_2$, $CH_4$, $N_2O$)

- land use
- land use change
- forestry (bioenergy, harvested wood products)

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# EU ETS key features

## Provisional agreement

# Ambition

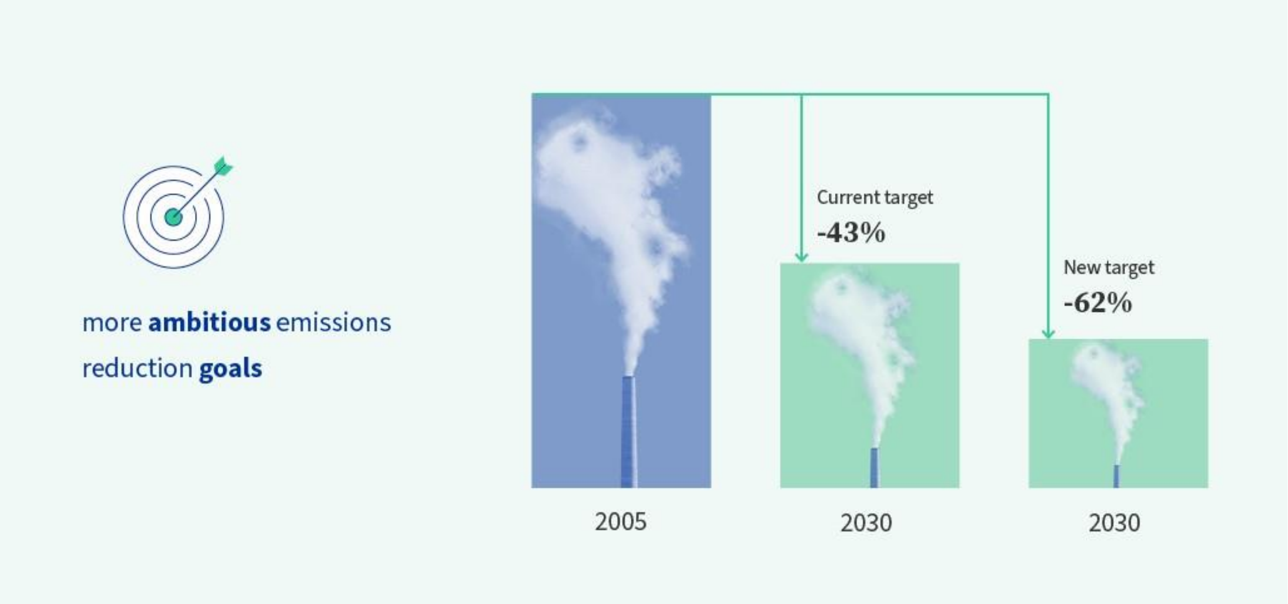
- Revision of EU ETS provisionally agreed in December 2022

- Need to **update the cap in line with "at least -55%"**: currently -43%

  - Increase the linear reduction factor (currently 2.2%)

  - Two major reductions of the cap in the year of entry into force and in 2026 to align the cap with emissions, while allowing for some breathing space in the short term

- Extension of ETS to maritime, with consequent adjustment of the cap and linear reduction factor

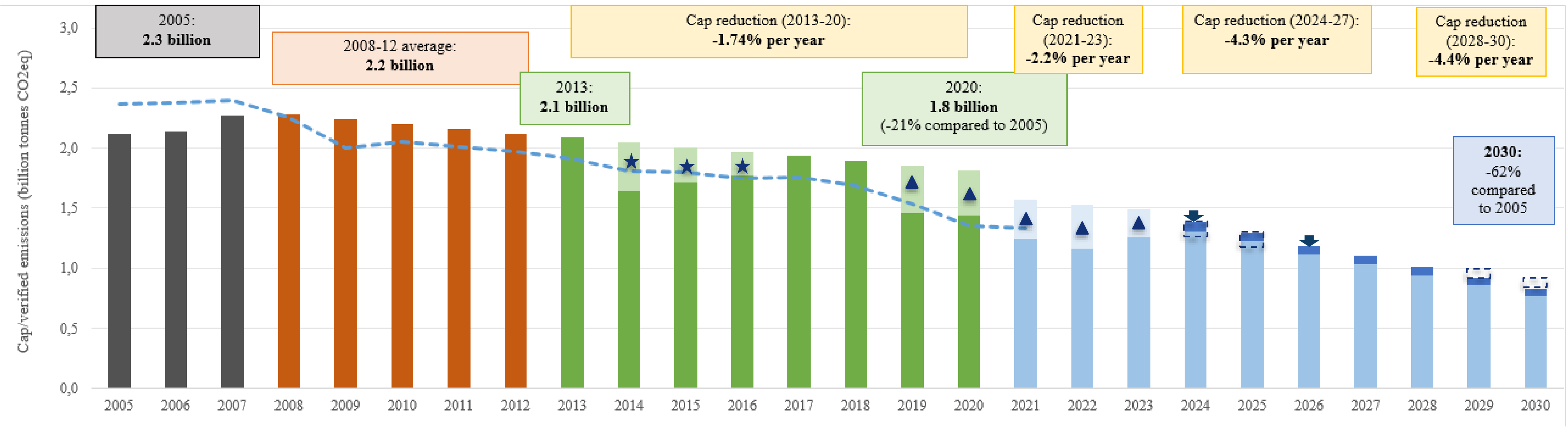



Source: Council of the EU

| | EC proposal | Agreement |
|---|---|---|
| Target EU27 (EC scope) | -61% | -62% |
| Rebase 2024 | 117 M allowances | 90 M allowances |
| Rebase 2026 | | 27 M allowances |
| LRF from 2024 | -4,2% | -4,3%: 2024-27<br>-4,4%: 2028-30 |
| Cumulative cap EU27+EEA | 12.309 Mt | 12.295 Mt |

# Ambition

## The cap reflects the environmental ambition and declines year on year




★ Backloaded allowances (total of 900 million)

▲ MSR feeds

MSR feed in/out depending on market surplus

Cap rebasing of 90Mt in 2024 and 27Mt in 2026

Cap increase related to the maritime scope extension as of 2024



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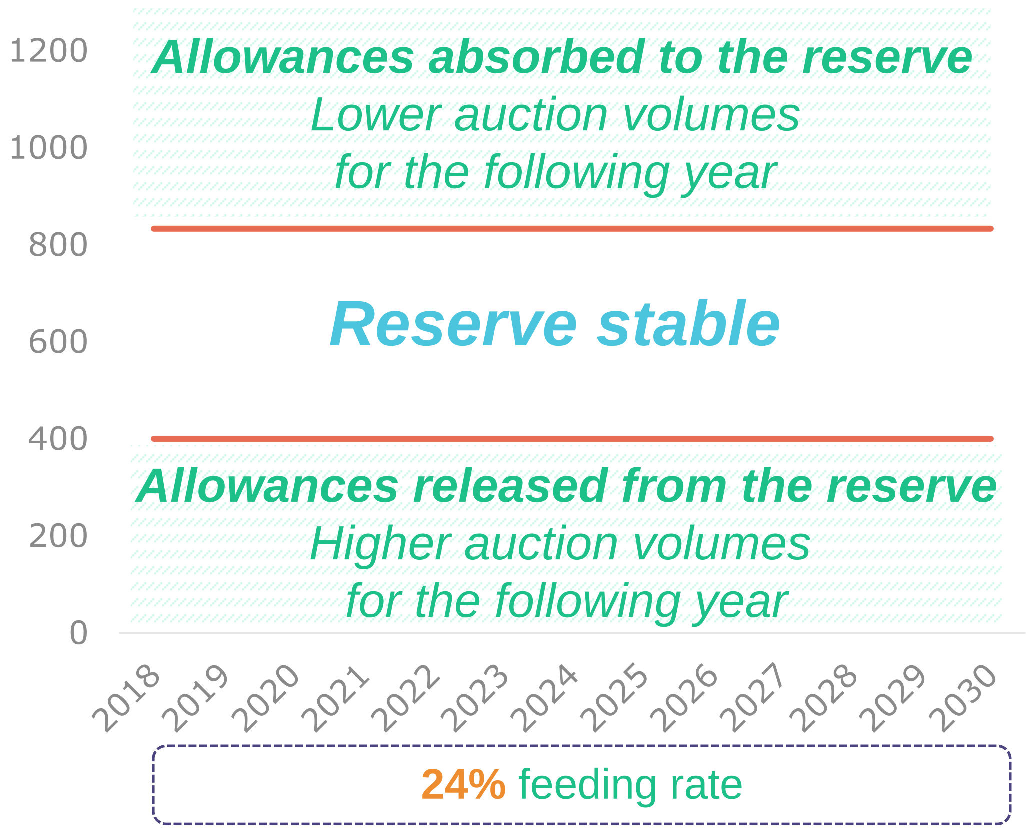
# Market Stability Reserve




- **Addresses the current surplus of allowances** and improves system's resilience to major shocks by adjusting the supply of allowances to be auctioned.

- Allowances absorbed or released based on the surplus. Future inclusion of a “buffer” to eliminate threshold effects.

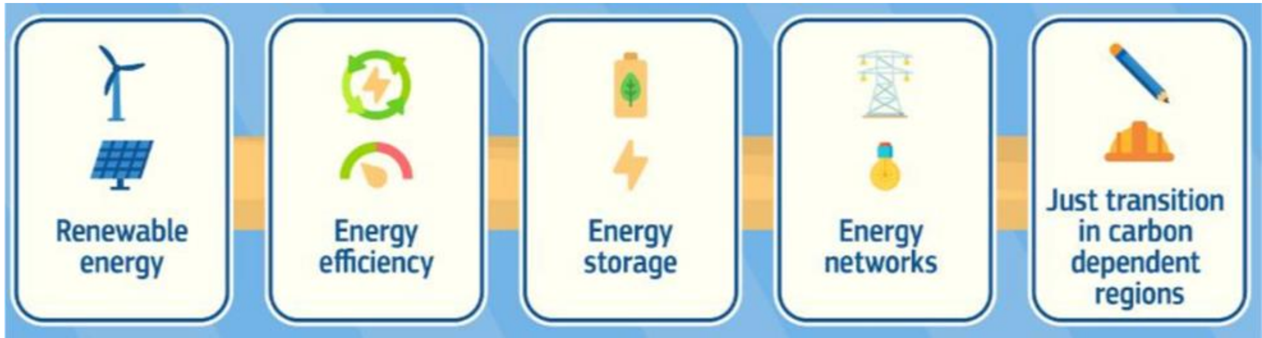
- Operates according to the pre-defined rules - no discretion to the Commission or Member States in the implementation.

# Revenue use (1/2)

- Important **revenue** for MS from auctioning of allowances: more than €100 billion so far
- Member States using ~75% of this revenue to tackle climate change, reporting on this to the Commission. From 2024, 100% of revenue will be used for climate purposes
- Auctioning of allowances also finances the Modernisation Fund and the Innovation Fund

**Modernisation Fund**

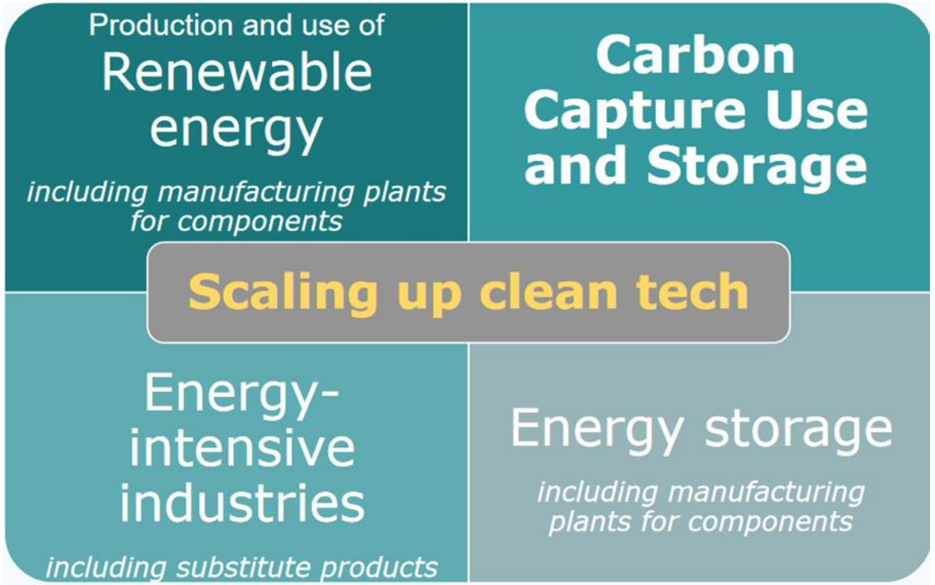
- **Additional 2.5%** of the cap (on top of the 2% existing) and extended eligibility (EL,PT, SI) for the additional volume;
- **Increased share for priority investments (90%)** and restriction on natural gas.
- Investments must **comply with do-no-significant-harm principle** from 2025



# Revenue use (2/2)

**Innovation Fund:**

- **Size increase** to about 530 million allowances
- Maintains the focus on **innovative** technologies with stronger reference to upscalling; Introduction of **medium-sized** projects and **stronger attention to geographical balance**
- Extends the support to **low carbon innovation in aviation, maritime, road transport and building sectors**; special attention to **CBAM** sectors
- New instrument: **competitive bidding** (auctions) (fixed premia or (carbon) contracts for difference)

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# New ETS2 for buildings, road transport and non-ETS industry fuels

- 30% of building heating emissions, electric vehicles and large part of industry fuel emissions already covered by existing ETS

- For the buildings and road transport sectors, the new ETS could contribute 45% of the additional emission reductions needed in 2030 compared to what current policies would achieve in 2030

➢ **Separate upstream emissions trading system for buildings, road transport, combustion fuels used by non-ETS industry**

- Emission cap set in line with cost-effective contribution:
  -42% GHG reductions 2030 to 2005, LRF of 5.1% (cf 2024)

- No free allocation, auctioning revenues to be used to finance Social Climate Fund or by MS for climate and social purposes.

# Auctioning, free allocation and the Union registry

# The EU Emissions Trading System – Allowance Life Cycle

- **Creation/Issuance** – the number of allowances is determined by the overall cap. The Commission creates/issues the allowances that are allocated for free to the Member States, releases them for auctioning or keeps them in the Market Stability Reserve

- **Free Allocation** – Installations/operators receive free allowances to prevent "carbon leakage". The number of allowances is determined based on benchmarks. Allocation is granted to ETS operators by Member States

- **Auctioning** – Compliance and non-compliance entities can acquire allowances through auctions (European Energy Exchange – EEX)

- **Trading** – Allowances can be traded on secondary markets equivalent to other financial instruments

- **Surrender** – compliance entities (operators) must surrender the equivalent of their $CO_2$ emissions in EU allowances by end of April of the year following the year in which the emissions occurred

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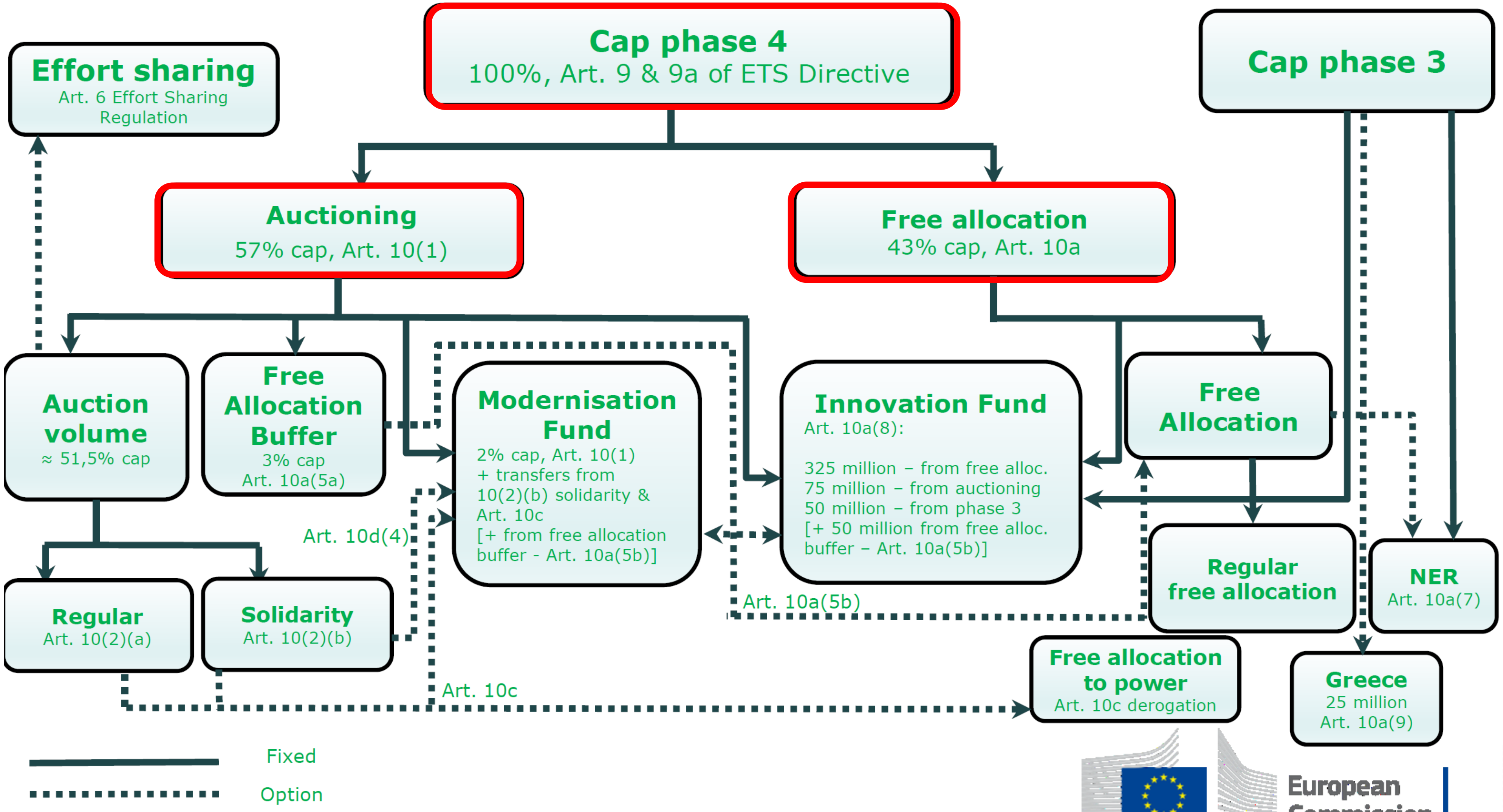
# Auctioning -

- A transparent method for allocating emission allowances that allows participants to acquire the allowances concerned at market price
- The default method of allocating allowances since 2013 (so-called phase 3 of the EU ETS). Up to 57% of the allowances allocated through auctioning.
- The proportion of allowances that have to be bought through auctions is increasing.
- The exact auctioning volume:
  - Determined annually based on the provisions of the ETS Directive.
  - May also be impacted by the functioning of the Market Stability Reserve.
- **Auction platform** (EEX) – regulated market, licensed under MiFID
- **Clearing house** (ECC) – licenced under EMIR
- **Auction rules** – set in the Auctioning Regulation *(note: the auctioning process is not supervised by financial regulation like MiFID or EMIR)*

# Auctioning – Volume (ETS Directive)



# Auctioning – Relevant Legislation

- ETS Directive
- Auctioning Regulation

**Environmental**

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- Joint Procurement Agreement
- Common auction platform (CAP3) contract with Annexes
  - Escrow and custody agreements
  - Clearing conditions, as part of contractor’s tender

**Operational**

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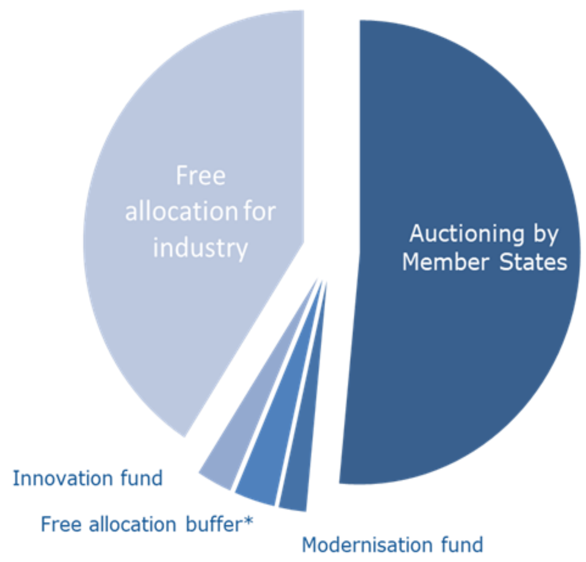
- Since 2018, **emission allowances are classified as financial instruments** under the Markets in Financial Instruments Directive (MiFID).
- Financial rules are applicable to emission allowances, in particular:
  - Market Abuse Regulation (MAR)
  - Anti-Money Laundering Directive (AMLD)
  - Settlement Finality Directive
  - Regulation on OTC Derivatives, Central Counterparties and Trade Repositories (EMIR)

**Financial**

# Carbon leakage and free allocation

- **Carbon leakage**: emission increase if more GHG-intensive imports replace less GHG-intensive production in the EU
- **Free allocation** for industries to address the risk of carbon leakage
- Since 2013, free allocation takes into account the performance of the best installations in the ETS countries (benchmarks)
- Overall limitation of free allowances set by ETS Directive




* Allowances dedicated for auctioning that may be converted

# Simplified principle to calculate free allocation

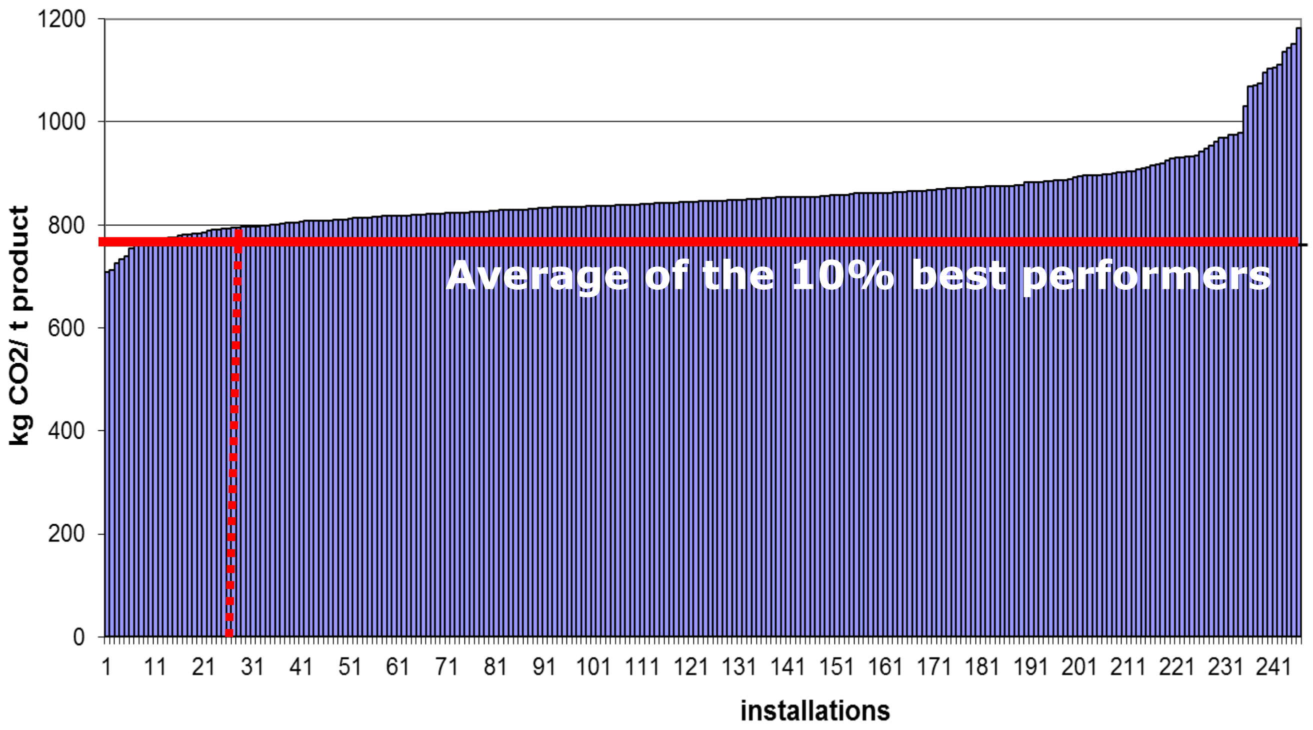
**Free allocation = BM × HAL**

***Benchmark***

***Historical Activity Level (production)***

# Benchmarks (BM)

- Benchmarks in principle based on average of 10% best performers
- Total of 54 benchmarks. 52 product BMs and 2 fall-backs (heat and fuel)
  - Refineries (1);
  - Iron & Steel (6);
  - Non-ferrous metals (2);
  - Cement and lime (5);
  - Glass (4);
  - Ceramics (4);
  - Other construction products (4);
  - Pulp & Paper (11);
  - Chemicals (15);
  - Fall-backs (2).

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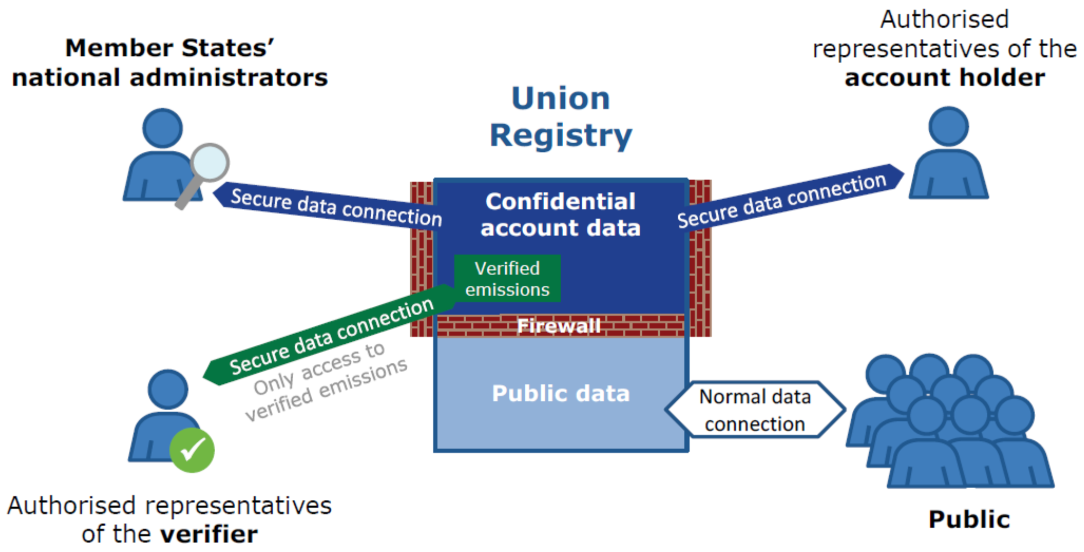
# The Union Registry

- Since 2012 **national registries were merged** into the Union Registry providing EU-wide standardised and centralised system for EU Member States, Iceland, Norway and Liechtenstein (Regulation (EU) 2019/1122)
- Similar to an online banking system, **users must open an account** to participate in the system and perform transaction with allowances
- The Union Registry **records all allowances** in separate accounts and **keeps record of all transactions**
- **The Registry Regulation** sets the rules for the functioning of the Union Registry

# The Union Registry

- The system is co-managed by the Commission and the Member States
  - **Central Administrator** (the Commission), taking regulatory decisions, operating and maintaining the Registry
  - **National Competent Authorities (NCA)** (Member States), taking regulatory decisions concerning operators (free allocation and compliance)
  - **National Administrators (NA)** (Member States) who manage the accounts on Member State level and are involved in transaction monitoring and approval
- The system tracks the issuance, allocation, auctioning, ownership, transfer, surrender, and deletion of allowances through the accounts

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# Monitoring, Reporting and Verification (MRV)

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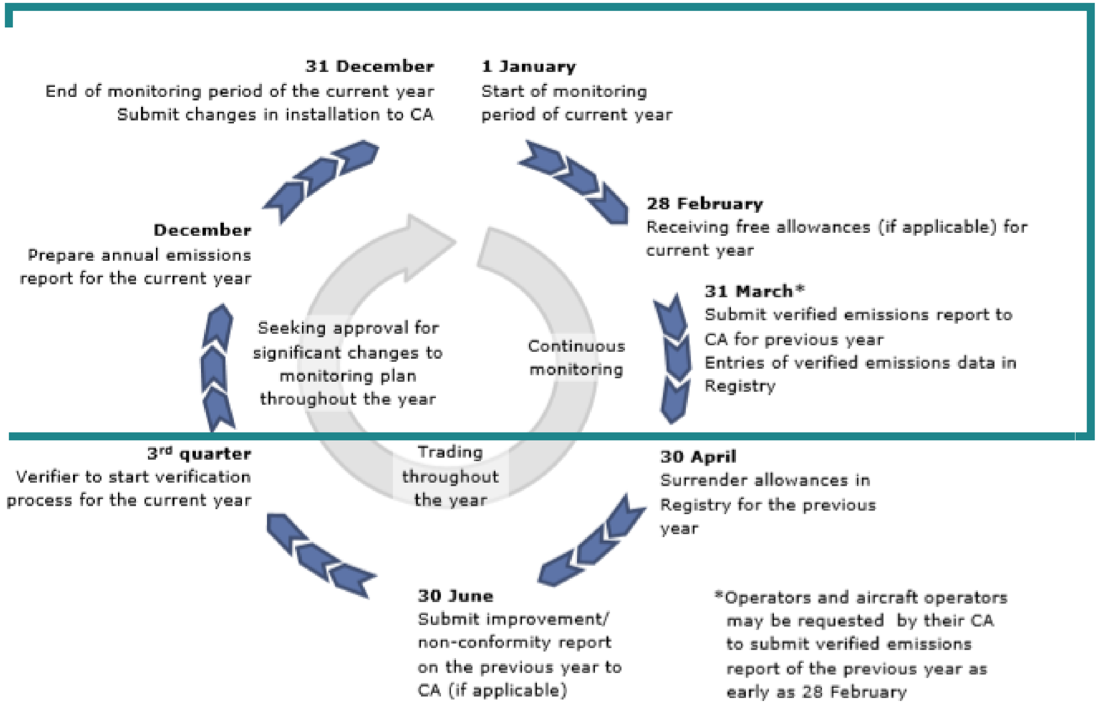
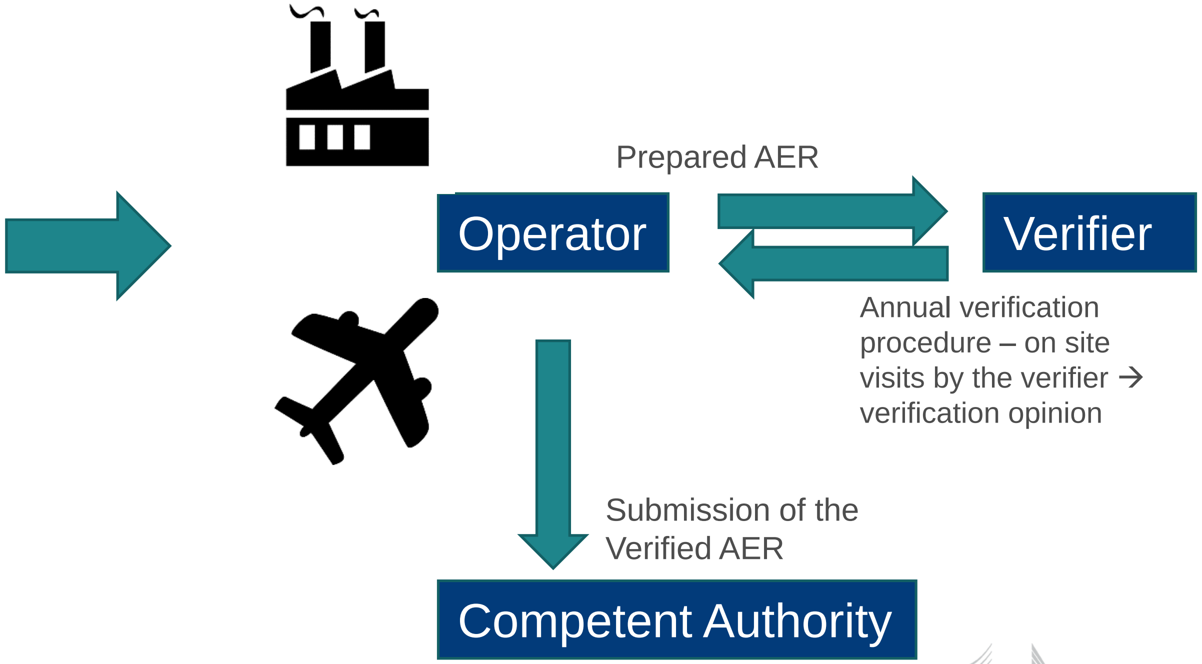
# Compliance and enforcement

# Preparing an Annual Emissions Report

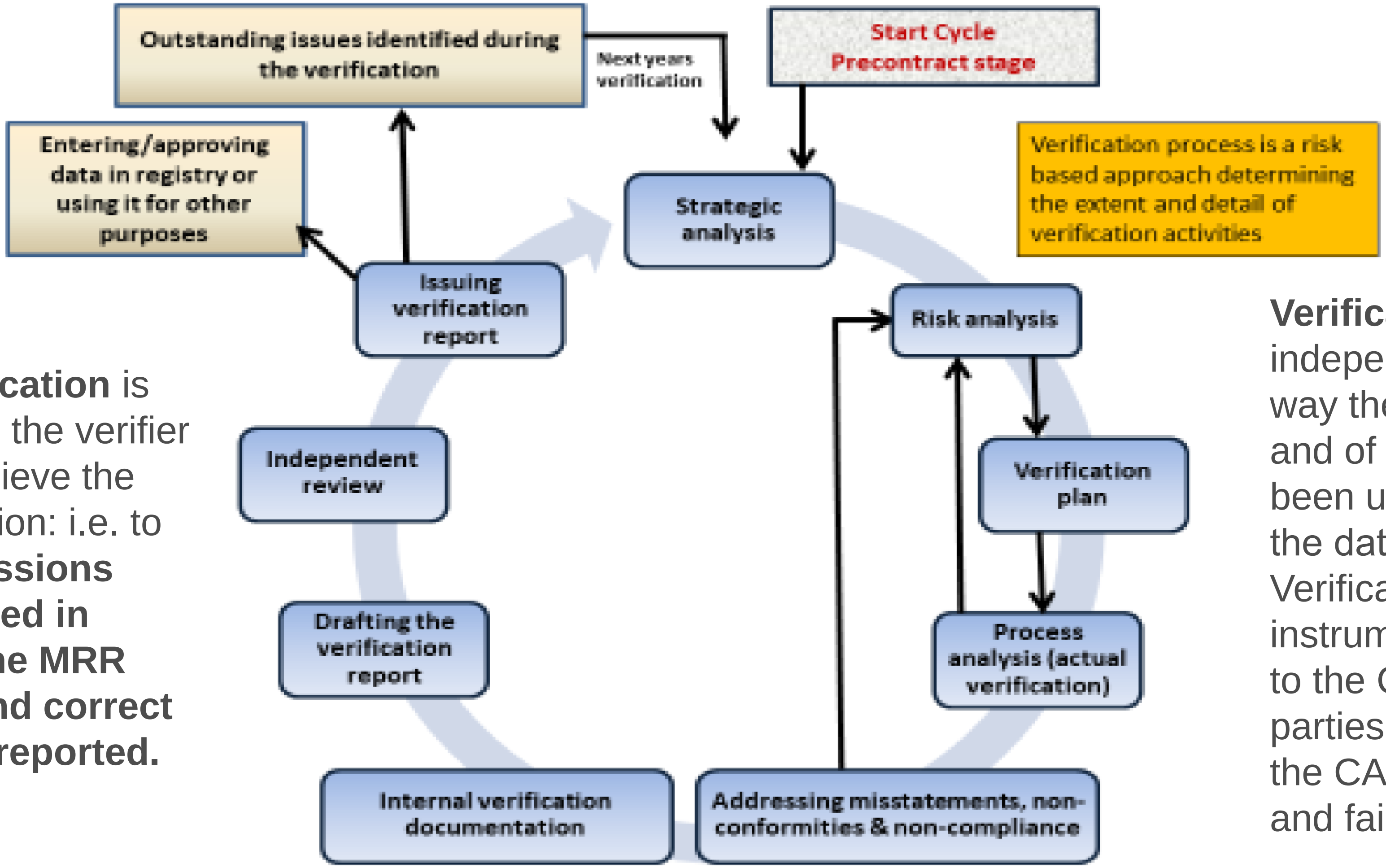
The **operator monitors the emissions** throughout the year. After the end of the calendar year (within three months*) he must prepare the annual emissions report (AER), seek verification and submit the verified report to the Competent Authority (CA).



# The function and process of verification

**The scope of verification** is defined by the tasks the verifier must perform to achieve the objective of verification: i.e. to ensure that the **emissions have been monitored in accordance with the MRR and that reliable and correct emission data are reported.**




**Verification** involves an independent assessment of the way the MP has been implemented and of the data sources that have been used to collect and collate the data in the operator's report. Verification is an essential instrument in providing confidence to the CA and other relevant parties that the report submitted to the CA, represents a faithful, true and fair account of the emissions.

# Thank you



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# Backup slides

# Link with CBAM (1/2)

- **Industrial Carbon Border Adjustment Mechanism (CBAM) sectors** are iron & steel, cement, fertilisers, aluminium and hydrogen; they represent around 54% of the total free allocation in the period 2021–2025
- **Free allocation under the ETS and the proposed CBAM are interlinked**: To ensure compatibility with the EU's international obligations, and maintain incentives to decarbonise, free allocation will be phased out as CBAM is phased in
- **Free allocation will be phased out using an S-shaped trajectory** (next slide)
- **Review of the carbon leakage risk** for CBAM sectors by 2025
- Free allocation no longer provided to these sectors will be auctioned and the **revenues accrue to the Innovation Fund**
- **Significant share of Innovation Fund for CBAM sectors**
- **Retained free allocation from conditionality** may partly be used by MS to address residual risks of carbon leakage

# Link with CBAM (2/2)

## Free allocation phase-out