International Carbon Action Partnership

UK Emissions Trading Scheme (UK ETS)

General Information

ETS Description

The UK Emissions Trading Scheme (UK ETS) began operating in January 2021, following the departure of the UK (excluding power operators located in Northern Ireland) from the EU ETS. Verified emissions from stationary UK ETS operators currently account for around a quarter of the UK's territorial GHG emissions. The first phase of the UK ETS runs until 2030.

The UK ETS covers around 1,000 installations in the power and industrial sectors, as well as around 400 aircraft operators. Aviation activity covered includes flights within the UK as well as flights departing the UK to the European Economic Area (EEA) and Switzerland. Domestic maritime emissions will be brought under the UK ETS from July 1, 2026.

Covered entities must surrender allowances for all their in-scope emissions. Allowances are allocated primarily through auctioning, with a portion freely allocated to mitigate the risk of carbon leakage. The system has both a cost containment mechanism (CCM) and an auction reserve price (ARP), to support market stability.

The UK ETS cap trajectory and system design are consistent with the UK's target of achieving net zero by 2050. The UK ETS Authority has announced the expansion of the system to waste incineration and energy-from-waste, domestic maritime, and GHG removals, and proposed a framework to add further high emitting sectors. Additionally, the UK government is introducing a UK CBAM to begin on January 1, 2027, applying a carbon price to emissions-intensive imports.

The European Commission and the UK government have announced their intention to pursue a link between their respective systems.

ETS Status

in force

Jurisdictions

United Kingdom

Year in Review

In 2025, the UK ETS Authority focused on implementing previously signaled reforms, preparing for scope expansion, and setting the stage for post 2030 design. It also progressed work to align free allocation reforms with the forthcoming UK CBAM.

In February 2025, the Authority consulted on extending the UK ETS cap beyond 2030.

In May 2025, the UK and the EU agreed to work towards establishing a link between their ETSs. The envisaged link would enable mutual recognition of allowances for compliance, allow cross-system trading, and create the conditions for mutual CBAM exemptions.

In July 2025, the Authority published interim responses to the 2024 consultations on scope expansion and greenhouse gas removals (GGRs), confirming key timelines: maritime coverage from July 2026 and a voluntary MRV-only period for waste incineration and energy from waste from January 2026 ahead of full inclusion from 2028. It also confirmed the integration of UK-based engineered removals from 2029, subject to legislation and further consultation.

In November 2025, the Authority published the main response to the maritime consultation, building on the interim response earlier in the year. This sets out the final details on the expansion to domestic maritime emissions, including cap adjustment to account for the expansion, exemptions, delay to the inclusion of offshore vessels until January 2027 and future reviews. Alongside this, the Authority also launched a consultation on bringing emissions from international maritime voyages into the UK ETS, proposing to include voyages starting or ending in the UK from 2028, covering 50% of emissions related to such journeys.

In October 2025, the UK ETS Authority launched a consultation to assess the impacts on regional air connectivity following the removal of UK ETS free allocation for aviation. The consultation sought views on the potential impact on remote domestic routes, whether government action was needed to address any negative effects, the criteria for such action, and the best way to provide support. The Authority emphasized that it was not looking to shield the aviation sector from wider market or regulatory factors. The consultation closed in December 2025.

The Authority confirmed that the second free allocation period will start in 2027, with 2026 treated as an extension of the current period, ensuring that the Free Allocation Review changes and CBAM introduction take effect together. In November 2025, the final Authority response to the Free Allocation Review also confirmed rules for the next allocation period from 2027 to 2030, maintaining carbon leakage protection for sectors most at risk, while free allocation for CBAM-covered sectors will be gradually phased out from 2027 to enable the mechanism to serve as the primary means of mitigating carbon leakage.

As announced in December 2023, and following policy consultation in 2024 and technical consultation in 2025, the government is legislating in the Finance Bill 2025-26 to introduce a CBAM from January 1, 2027. The UK CBAM will apply to goods from the following industrial sectors: aluminum, cement, fertilizers, hydrogen, iron, and steel.

In December 2025, the Authority announced the extension of the UK ETS into a second Phase running from 2031 to the end of 2040. The Authority also announced final decisions on markets policy for a standalone scheme. The Authority decided to retain and inflation-proof the Auction Reserve Price (ARP), with changes taking effect in 2026 and maintain the existing design and operation of the Cost Containment Mechanism (CCM).

Sectoral coverage

Maritime
Mining and extractives
Domestic Aviation
Industry
Power

Revenue usage

General budget, including debt reduction

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO2e)

388 $MtCO_2e$ (*2023*)

GHG reduction targets

By 2030: At least a 68% reduction in UK net GHG emissions from 1990 levels, including emissions from LULUCF (NDC 3.0)

By 2035: At least an 81% reduction in UK net GHG emissions from 1990 levels, including emissions from LULUCF (NDC 3.0)

Limit UK net GHG emissions to 965 $MtCO_2e$ over 2033 to 2037, representing ~77% reduction from 1990 levels, including emissions from LULUCF and international aviation and shipping (“Carbon Budget Order 2021”)

By 2050: Net-zero UK GHG emissions, including emissions from LULUCF and international aviation and shipping (“Climate Change Act 2008 [2050 Target Amendment] Order 2019”)

Current Allowance Price (per t/CO2e)

Current prices can be checked here

Size & Phases

Covered emissions (2023)

25.00%

Verified ETS Emissions

96.80MtCO_2e

GHGs covered

CO2, N2O, PFCs, CH4

Phases

PHASE 1: Ten years (2021 to 2030)

PHASE 2: Ten years (2031 to 2040)

Cap or total emissions limit

An absolute cap limits the total emissions allowed in the system and is fixed ex-ante.

FIRST ALLOCATION PERIOD (2021 to 2026): 712 MtCO_2e, to be adjusted to reflect the hospital and small emitter opt-outs. The first allocation period was extended to include 2026, in order to ensure that changes to free allocation rules aligned with the introduction of the UK CBAM in 2027.

SECOND ALLOCATION PERIOD (2027 to 2030)[1]: 224 MtCO_2e, to be adjusted to reflect the hospital and small emitter opt-outs.

The cap was initially set at 5% below the UK's notional share of the EU ETS cap for its fourth phase. The cumulative caps for the first and second allocation periods were originally 736 MtCO_2e and 630 MtCO_2e, respectively. However, they were reduced following a 2022 consultation on reforming the UK ETS, which included aligning the cap trajectory with the UK's net-zero emissions target. The cap for 2026 is 77.4 MtCO_2e. Allowances for the New Entrants' Reserve (NER) are part of the overall cap.

[1] An Authority publication of December 2024 announced that the second allocation period would start in 2027. To effect this, a new allocation period will be created for a standalone year in 2026, however free allocations for this time will be calculated on the same basis as 2021 to 2025 free allocations.

Sectors and thresholds

POWER SECTOR AND INDUSTRY: The UK ETS applies to a specified list of activities of installations in the power and industrial sectors. This includes activities involving the combustion of fuels in installations with a total rated thermal input exceeding 20 MW, as well as activities in refining, heavy industry, and manufacturing. Power generators in Northern Ireland still fall under the EU ETS, as they are part of the integrated Single Electricity Market with the Republic of Ireland.

In addition to the power sector's participation in the UK ETS, the UK's Carbon Price Support (CPS) policy imposes an additional carbon tax of GBP 18 (USD 23.70) per tCO_2 for power generators in Great Britain (excluding Northern Ireland) using fossil fuels.

From 2025, the UK ETS includes CO_2 venting from the upstream oil and gas sector, covering process emissions from extracted hydrocarbons that are vented or released through and/or unlit flare. No additional free allowances will be provided to impacted facilities.

Hospitals and Small Emitter (HSE) Scheme: Hospitals and small emitters with emissions below 25,000 tCO_2e per year and a net-rated thermal input lower than 35 MW can apply for HSE status. This allows them to monitor and report their annual emissions against individual and annual emission reduction targets, rather than surrender allowances for their emissions. This approach is similar to the UK's opt-out scheme in Phase 3 of the EU ETS.

Ultra-Small Emitter Exemption: For stationary installations emitting fewer than 2,500 tCO_2e per year, an ultra-small emitter exemption is in place. These installations are required to monitor emissions and notify the regulator if emissions exceed the threshold.

AVIATION: UK ETS obligations arise from flights within the UK, flights from the UK to a country within the EEA (excluding outermost regions) and to Switzerland, and flights between the UK and Gibraltar. [1] Commercial aircraft operators with fewer than 243 full scope flights in a four-month period for three consecutive four-month periods or total full scope annual emissions of less than 10,000 tCO_2 are exempt.

Non-commercial aircraft operators are not subject to UK ETS obligations if their annual full scope emissions fall below 1,000 tCO_2. Full scope flights are those departing from or arriving in an aerodrome in the UK, Gibraltar, an EEA state, Switzerland, or outermost regions other than an excluded flight.

The UK is also considering how the ETS should interact with ICAO's Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). In December 2024, the UK Department for Transport launched a consultation on implementing CORSIA in the UK, in partnership with the UK ETS Authority, which includes options for how CORSIA could interact with the UK ETS on flights in scope of both schemes.

MARITIME: From July 1, 2026, the UK ETS will include domestic maritime emissions from ships of 5,000 gross tonnage or more on voyages between UK ports, including round trips. In addition, all emissions from ships of 5,000 gross tonnage or more while in a UK port will be captured by the scheme, regardless of origin or destination. Covered gases are CO_2, CH_4, and N_2O. Operators must prepare Emissions Monitoring Plans, appoint accredited verifiers, and submit annual emissions reports under an operator-based MRV framework. Government non-commercial vessels (e.g., military and emergency services) will be exempt. The framework will use standardized factors and zero-rate sustainable fuels on a tank-to-wake basis, with scope and thresholds subject to review as international regimes evolve.

In November 2025, the Authority launched a consultation on bringing emissions from international maritime voyages into the UK ETS, proposing to include voyages starting or ending in the UK from 2028, covering 50% of emissions related to such journeys.

WASTE INCINERATION AND ENERGY FROM WASTE: Waste incineration and energy from waste facilities are planned to enter the UK ETS from 2028, following a voluntary MRV-only period from 2026 to 2028. The scope will apply to facilities processing ≥3 tonnes/hour of nonhazardous waste or ≥10 tonnes/day of hazardous waste, including clinical waste incinerators, with high-temperature hazardous waste incinerators exempted. During the MRV period, operators must monitor, report, and verify emissions annually without compliance obligations, enabling the Authority to refine factors and policy design ahead of full inclusion.

[1] Aviation activities included in the UK ETS are outlined in the "Greenhouse Gas Emissions Trading Scheme Order 2020".

Point of regulation

Point source

Type of entities

Installations, aircraft operators, maritime operators

Number of entities

A total of 1,058 entities in 2024, made up of 688 installations and 370 aircraft operators

Allowance Allocation & Revenue

Allowance allocation

AUCTIONING: Auctioning is the primary means of allowance allocation in the UK ETS. Auctions currently have a GBP 22 [1] (USD 28.97) Auction Reserve Price (ARP), below which allowances will not be sold. Auctions clear even when not all allowances are sold. Unsold allowances are carried over to the next four auctions, up to a limit of 125% of allowances originally intended for sale at those auctions. If all four subsequent auctions reach the 125% limit, the remaining unsold allowances are transferred into the Market Stability Mechanism Account.

In 2025, ~51.5 million allowances were sold at auction, raising ~GBP 2.4 billion (~USD 3.2 billion). As set out in the auction calendar, ~52 million UK Allowances (UKAs) will be auctioned in 2026 across 25 auctions.

FREE ALLOCATION: A number of UKAs are allocated for free to industrial participants at risk of carbon leakage. The number of free allowances that an installation is entitled to is determined using the historical activity level, an industry benchmark, and a carbon leakage exposure factor (CLEF). The benchmarks and Carbon Leakage List (used to determine CLEFs) that have been used for the first allocation period are those used in Phase 4 of the EU ETS in the most part with an exception for the lime benchmark and malt extraction's carbon leakage status which were temporarily amended from 2024 to 2026. Historical activity levels for the first allocation period's free allocations are based on data collected under the EU ETS.

There is a maximum number of allowances allocated for free (the "industry cap"). Originally, an absolute value for the industry cap was established for each year of the first phase. This approach was changed following the 2022 consultation on reforming the UK ETS. From 2024, the industry cap is set at 40% of the total cap and reduces annually in line with the cap trajectory. If the total amount of free allocation exceeds the industry cap for a particular year, unallocated UKAs from the industry cap from the previous year, as well as allowances from a flexible reserve, can be used. As a last resort, a cross-sectoral correction factor would be applied to ensure a uniform reduction across eligible participants.

An initial allocation table, which lists the volume of free allowances for each installation for the first allocation period, was published in May 2021. Eligible installations must submit a verified Activity Level Report (see 'Compliance' section). If the data in the Activity Level Report shows an increase or decrease in activity of 15% or more from historical activity levels (calculated based on the previous two years' activity levels), their free allocation will be recalculated.

The Authority completed the Free Allocation Review, launched in 2021 and run in two phases. The final Authority Response, published in November 2025, confirms that the second allocation period will begin in 2027, with 2026 treated as an extension of the first period. This ensures that free allocation reforms take effect alongside the introduction of the UK CBAM.

Key decisions include:

- Operators able to choose to have activity data for either the years 2020 only, or 2020 and 2021 excluded for the purpose of determining historical activity level for the 2027 to 2030 allocation period;
- The retention of current benchmarks for 2027, with the intent to adopt updated EU benchmark values from 2028 to 2030;
- Retaining the current carbon leakage list;
- No introduction of tiering of free allocation for sectors at risk of carbon leakage;
- No early phase out of free allocations for sectors not on the carbon leakage list;
- No additional methodologies to be introduced in 2027, which would introduce conditions on the provision of free allocation; and
- A gradual phase out of free allocations for sectors covered by the UK CBAM beginning in 2027, with an indicative phase out trajectory of nine years.

The Authority also confirmed updated rules for ceased installations.

Free allocation for aircraft operators has been fully phased out from January 1, 2026, as previously announced.

CBAM: The UK CBAM will work alongside the UK ETS to mitigate the risk of carbon leakage from imports. The government confirmed that the mechanism will apply from 2027.

The CBAM will initially cover aluminum, cement, fertilizers, hydrogen, and iron and steel, and will initially account for direct (process) emissions embedded in imported goods. Indirect (electricity-related) emissions will be delayed until 2029 at the earliest.

To ensure consistency between the domestic ETS and the border measure, free allocation for sectors covered by the CBAM will be gradually adjusted from 2027. This adjustment would reflect the introduction of a carbon price on imports, reducing the need for free allocation as a carbon leakage mitigation tool.

The revised Free Allocation framework ensures that CBAM alignment and free allocation phase-in/out schedules are synchronized.

NER: A reserve of free allowances is set aside for installations that become eligible for participation within Phase 1 and for covered installations that significantly increase their activity level. The number of free allowances for new entrants is determined based on their activity in the first year of operation, the industry benchmark, and CLEF.

[1] The ARP will be adjusted for inflation to maintain its real value, a nominal increase from GBP 22 to GBP 28, in 2026.

Auctioning share

59%

Total Revenue

GBP 19.7 billion (USD 25.9 billion) since the beginning of the program
GBP 2.4 billion (USD 3.2 billion) in 2025

2025

Use of Revenues

Revenues from UK ETS auctions accrue to the general budget and are not earmarked.

Flexibility & Linking

Offset credits

The use of offset credits is not allowed.

Engineered Greenhouse Gas Removals (GGRs) are set to integrate into the UK ETS from 2029, with legislation to be finalized by 2028. In the initial phase, credits from eligible domestic projects would replace allowances one-for-one without changing the cap level. Credits will be issued ex-post after verified sequestration and must meet a minimum 200-year permanence requirement. The Authority is considering differentiating removal allowances from regular allowances and it is assessing auction mechanisms to support market access, alongside potential future inclusion of high-quality nature-based removals.

Banking and borrowing

Banking is allowed, and allowances remain valid in future years of the scheme.

Limited and implicit borrowing is allowed, i.e., the use of UKAs allocated for free in the current year for compliance in the previous year.

Links with other Systems

The UK ETS is not linked with any other system.

The EU and UK agreed to work towards the linking of their ETSs, as set out in the Common Understanding at the May 19, 2025 EU-UK Summit. The envisaged link would enable mutual recognition of allowances for compliance, allow cross-system trading, and create the conditions for mutual CBAM exemptions.

Other carbon pricing instruments in the jurisdiction

Carbon tax: UK Carbon Price Support (CPS)

The CPS, introduced in 2013, is an additional GBR 18/tCO_2 (USD 23.70/tCO_2) tax on emissions from fossil fuel power generation in Great Britain (excluding Northern Ireland), on top of the UK ETS carbon price.

Domestic crediting mechanisms: UK Woodland Carbon Code and Peatland Code

Compliance

Compliance mechanism

Covered entities must surrender one compliance unit (UK ETS allowance) per tCO_2e emitted for all their covered emissions, and allocation is based on auctions and free allocation.

Compliance Period

One year. Covered entities have until the end of April of the year following the reporting period to surrender allowances. These provisions are the same as under the EU ETS.

Monitoring, Reporting, Verification (MRV)

FRAMEWORK: The UK ETS has adopted the MRV framework of Phase 4 of the EU ETS, including discretionary changes regarding reduced frequency of improvement reporting and the simplification of monitoring plans. “UK ETS Order 2020” gives effect (with modifications) to the “Monitoring and Reporting Regulation (MRR) 2018” and the “Verification Regulation (VR) 2018”.

MONITORING: The UK ETS requires continuous, year-round monitoring under approved plans, with year-end compilation. Maritime MRV starts July 1, 2026, with operator-based EMPs and verification. Waste has a voluntary MRV-only period from 1 January 2026 ahead of 2028 inclusion.

Installations with Hospital and Small Emitter (HSE) status or Ultra-Small Emitter (USE) status are still required to monitor their emissions and notify the regulator if they exceed relevant thresholds.

REPORTING: Annual self-reporting. Annual emissions report (and activity level report where applicable) due March 31 for the prior year. USEs are required to submit verified emissions reports once every five years to apply for the status.

VERIFICATION: Verification by independent accredited verifiers is required before the end of March each year. Verifiers must be accredited by the UK Accreditation Service (UKAS) in accordance with the “Verification Regulation (EU) 2018/2067”, which is based on the ISO/IEC 17029 and ISO 14065 international standards for GHG validation and verification bodies**.**

Penalties and enforcement

Regulated entities must pay an excess emissions penalty for each tCO_2e emitted not matched by a surrendered allowance. This penalty is equal to GBP 100 per tCO_2e (USD 131.67) (March 2021 value) adjusted for inflation over time. Paying this penalty does not remove the obligation to surrender an allowance. A new deadline for any outstanding deficit can be set via issuance of a ‘deficit notice’, and non-compliance with this will result in a penalty of 1.5x the relevant carbon price, and may lead to escalating daily GBP 1,000 (USD 1,316) penalties if it continues to remain unmet. The names of non-compliant operators are published.

Market Regulation

Market Stability Provisions

COST CONTAINMENT MECHANISM (CCM)

Instrument type: Price-based instrument

Functioning: The UK ETS has a CCM to avoid price spikes by auctioning additional allowances. If the CCM is triggered, the Authority can decide on whether and how to intervene. The intervention can include: redistributing allowances between the current year’s auctions; bringing forward UKA supply from future years; drawing from the Market Stability Mechanism Account; auctioning up to 25% of remaining allowances in the NER; or auctioning allowances left unallocated from the industry cap in a given year.

The CCM is triggered if, for six consecutive months, the allowance price is three times the average allowance price in effect in the UK in the two preceding years.

Following public consultation, in December 2025 the UK ETS Authority announced its decision to maintain the existing design and operation of the CCM.

AUCTION RESERVE PRICE (ARP)

Instrument type: Set price

Functioning: The ARP establishes a minimum bid price at auctions. The ARP is currently set at GBP 22 (USD 28.97).

Following public consultation, in December 2025 the UK ETS Authority announced its decision to retain and inflation-proof the ARP to maintain its real value, thus implementing an inflation-based increase since its introduction (i.e., from GBP 22 [USD 28.97] to GBP 28 [USD 36.87]) in 2026 and increase the value yearly by inflation from 2027.

SUPPLY ADJUSTMENT MECHANISM (SAM)

Following public consultation, in December 2025, the UK ETS Authority announced that it would not introduce a SAM for a standalone UK ETS.

Market Design

MARKET PARTICIPATION: Compliance entities, non-compliance entities (domestic and international), and individuals.

MARKET TYPES:

Primary: The majority of allowances are allocated through auctioning. Auctions are held every two weeks, with dates and allowance amounts set out in the auction calendar. Compliance entities, financial institutions, and business groupings and public bodies acting on behalf of compliance entities can participate. Auctions are managed by ICE Futures Europe.

Secondary: UKAs are traded on the ICE Futures Europe exchange. Contracts for daily futures, futures, and options on futures contracts are available. Participants may also trade allowances over the counter. Participants in the secondary market must have an account in the UK Registry. Participants trading on the exchange must meet the requirements of the ICE Futures Exchange.

LEGAL STATUS OF ALLOWANCES: The “Recognized Auction Platforms (Amendment and Miscellaneous Provisions Regulations 2021) Affirmative Statutory Instrument” establishes UKAs as financial instruments.

Other Information

Institutions involved

UK Climate Change Committee (CCC): An independent, statutory body established under the “Climate Change Act 2008”. Its primary role is to advise the UK government and devolved administrations on emissions targets and on the progress in their achievement. The CCC provides expert advice on the design and implementation of the UK ETS, on its effectiveness in reducing emissions and reports on its progress.

UK ETS Authority: Overall responsibility for designing and implementing the UK ETS. It is composed of representatives of the UK government (Department for Energy Security and Net Zero (DESNZ), HM Treasury (HMT) and Department for Transport (DfT)), Scottish government, Welsh government, and the Department of Agriculture, Environment and Rural Affairs of Northern Ireland.

Regulators (Environment Agency; Scottish Environment Protection Agency; Natural Resources Wales; Northern Ireland Environment Agency; Offshore Petroleum Regulator for Environment and Decommissioning): Responsible for enforcing compliance with the UK ETS Regulations. The Environment Agency serves as the registry administrator and is responsible for the management of accounts in the UK Emissions Trading Registry.

Regulatory Framework

The Greenhouse Gas Emissions Trading Scheme Order 2020

The Greenhouse Gas Emissions Trading Scheme Auctioning Regulations 2021

Evaluation / ETS review

Phase 1 includes two mandatory whole-system reviews. The first review was published at the end of 2023, and the second must be published by the end of 2028.

The UK ETS evaluation program supports the mandatory review process. The report for Phase 1 of the UK ETS evaluation was published in December 2023.[1]

Phase 2 of the evaluation, assessing quantitative impacts of the UK ETS, is scheduled to be published in 2026.

[1] The report is available online.

Disclaimer

In line with ICAP’s mandate, the ICAP ETS map exclusively covers cap-and-trade systems for greenhouse gas emissions. Information displayed on the map is regularly updated by ICAP Secretariat staff based on official and public information as far as possible and subject to annual peer review by government representatives from the covered systems. Although the information contained in the map is