International Carbon Action Partnership

United Kingdom

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 cover 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 Europeaan Economic Area (EEA) and Switzerland. Covered installations and aircraft operators must surrender allowances for all their covered 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 auction reserve price, to support market stability.

The UK government remains open to the possibility of linking the UK ETS to other systems, if such a link would be advantageous for both systems.

ETS Status

in force

Jurisdictions

United Kingdom

Year in Review

In July, the UK ETS Authority announced a package of reforms aimed at aligning the scheme with each of the government's climate targets, such as the 2050 net-zero target. The announcement marked the conclusion of the previous year's public consultation on developing the scheme, which ran between March and June 2022.

Among the changes was a 30% reduction in the total number of allowances available over the period 2021 to 2030, to bring the cap trajectory in line with the country's net-zero strategy. The cap was rebased in 2024, with 53.5 million previously unallocated allowances auctioned between 2024 and 2027 to smooth the transition. In total (including redistributed allowances) auction volumes will be cut by around 45% by 2027.

The UK ETS Authority has also announced its intention to cover emissions from domestic maritime activities from 2026, and from waste incineration and waste from energy from 2028 (preceded by a two-year MRV-only period from 2026 to 2028). The UK ETS Authority has confirmed that engineered greenhouse gas removals (GGR) are also expected to be included. The UK ETS Authority has also decided to phase-out free allocation to aviation by 2026.

Decisions are anticipated on measures to support the effective functioning of the market and free allocation for stationary sectors, following the launch of a public consultation on these matters at the end of 2023.

Further consultation on bringing additional sectors into the UK ETS and incorporation of GGRs is also anticipated.

The UK ETS authority also published a suite of documents aimed at supporting the transparent, efficient and effective operation of the scheme. These include a review, an evaluation of the scheme, and a long-term pathway out to 2050.

The UK government also announced it will introduce a Carbon Border Adjustment Mechanism by 2027. The mechanism will initially apply to imports of emissions intensive industrial goods, including aluminium, cement, ceramics, fertiliser, glass, hydrogen, iron and steel. It is intended to mitigate carbon leakage risks, by ensuring that imports of products that face a cost of carbon under the UK ETS pay an equivalent charge at the border.

Sectoral coverage

Domestic Aviation
Industry
Power

Revenue usage

General budget, including debt reduction

Emissions & Targets

Overall GHG Emissions excl. LULUCF (MtCO2e)

429.5

GHG reduction targets

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

By 2035: 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)

here

Size & Phases

Covered emissions (2021)

25.00%

Verified ETS Emissions

107.80$MtCO_2e$

GHGs covered

CO2, N2O, PFCs

Phases

PHASE ONE: 10 years (2021-2030)

Cap or total emissions limit

A cap limits the total emissions allowed in the system.

FIRST ALLOCATION PERIOD (2021 to 2025): 633 MtCO2e, to be adjusted to reflect the hospital and small emitter opt-outs.

SECOND ALLOCATION PERIOD (2026 to 2030): 303 MtCO2e, 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 to the above following the conclusion of the 2022 consultation on reforming the UK ETS, which included aligning the cap trajectory with the UK's net-zero emissions target. The cap for 2024 is 92.1 $MtCO_2e$. Allowances for the New Entrants' Reserve (NER) are part of the overall cap.

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 per tCO_2 (USD 22.50) for power generators in Great Britian (excluding Northern Ireland) using fossil fuels.

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 opt out of the ETS and instead monitor and report their emissions and meet annual emission reduction targets. 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 less 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: Emissions are included from flights within the UK and flights from the UK and from Gibraltar to a country within the EEA and to Switzerland. Exemptions are made for commercial aircraft operators with fewer than 243 full scope flights per calendar year for three consecutive four-month periods or total full scope annual emissions of less than 10,000 tCO_2. Non-commercial aircraft operators are exempt if their annual full scope emissions fall below 1,000 tCO_2. 'Full scope' refers to all an aircraft operator's aviation activity, whether or not it is covered by the UK ETS.

ADDITIONAL SECTORS: In 2023, the UK ETS Authority announced its intention to expand the scheme to cover emissions from domestic maritime from 2026, and emissions from waste incineration and waste from energy from 2028.

Point of regulation

Point source

Type of entities

Installations, aircraft operators

Number of entities

A total of 1,429 entities in 2022, made up of 1,051 installations and 378 aircraft operators

Allowance Allocation & Revenue

Allowance allocation

AUCTIONING: Auctioning is the primary means of allowance allocation in the UK ETS. Auctions have a GBP 22 (USD 27.50) Auction Reserve Price (ARP), below which allowances will not be sold. In December 2023, the UK ETS Authority launched a consultation on the level and design of the current ARP. 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 2023, ~79 million allowances were allocated through auctioning, raising GBP 4.2billion (USD 5.2billion). As set out in the auction calendar, ~69 million UK Allowances (UKAs) will be sold in 2024.

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 CLEFs that have been used initially are those used in Phase 4 of the EU ETS. Historical activity levels 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 now 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 first phase of a review of free allocation started with a call for evidence in spring 2021 and continued in 2022 as part of the consultation on developing the UK ETS. The second phase of the review is focused on the free allocation methodology and better targeting support for those sectors most at risk of carbon leakage. Changes will be implemented from 2026.

In 2023, the UK ETS Authority announced that free allocation for aviation operators would be phased out from 2026.

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.

Auctioning share

54%

Total Revenue

GBP 14.6 billion (USD 18.7 billion) since beginning of the program in 2021
GBP 4.2 billion (USD 5.2 billion) in 2023

2023

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. The UK is considering introducing GGRs to be used for compliance within the scheme.

The UK is also considering how the UK ETS should interact with the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

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 UK government has indicated it is open to the possibility of internationally linking the scheme in the future but has not made any decision on preferred linking partners. The post-Brexit Trade and Cooperation Agreement between the EU and UK stipulates that the jurisdictions “shall give serious consideration to linking their respective carbon pricing systems in a way that preserves the integrity of these systems and provides for the possibility to increase their effectiveness”.

Compliance

Compliance mechanism

Covered entities must surrender one allowance per tCO2e emitted for all their covered emissions, and allocation is based on auctions or free allocation.

Compliance Period

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

Monitoring, Reporting, Verification (MRV)

REPORTING FREQUENCY: Annual self-reporting.

VERIFICATION: Verification by independent accredited verifiers is required before the end of March each year.

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.

Enforcement

Regulated entities must pay an excess emissions penalty for each tCO_2e emitted without surrendering an allowance. This penalty is equal to GBP 100 per tCO_2e (USD 125) initially but is adjusted for inflation over time. The names of non-compliant operators are published.

Market Regulation

Market Stability Provisions

SUPPLY ADJUSTMENT MECHANISM (SAM): The UK ETS Authority launched a consultation in December 2023 on the potential introduction and design of a SAM.

COST CONTAINMENT MECHANISM (CCM): The UK ETS has a CCM to avoid price spikes by auctioning additional allowances. If the CCM is triggered, regulators 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 UK ETS Authority has publicly consulted on the current design of the CCM.

Triggers*:* 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.

AUCTION RESERVE PRICE (ARP): To ensure a minimum level of ambition in the transition from the EU ETS to the UK ETS, an ARP of GBP 22 (USD27.50) is in place. The UK ETS Authority has publicly consulted on maintaining the ARP and sought views on the level and design of the ARP.

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 "Recognised Auction Platforms (Amendment and Miscellaneous Provisions Regulations 2021) Affirmative Statutory Instrument" establishes UKAs as financial instruments.

Other Information

Institutions involved

UK ETS Authority: Overall responsibility for designing and implementing the UK ETS. It is composed of the representatives of the UK Government, 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.

In addition to the whole-system reviews, the government is in the process of reviewing free allocation for stationary installations and aviation and changes required to align with CORSIA.

Disclaimer

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