



Technical brief

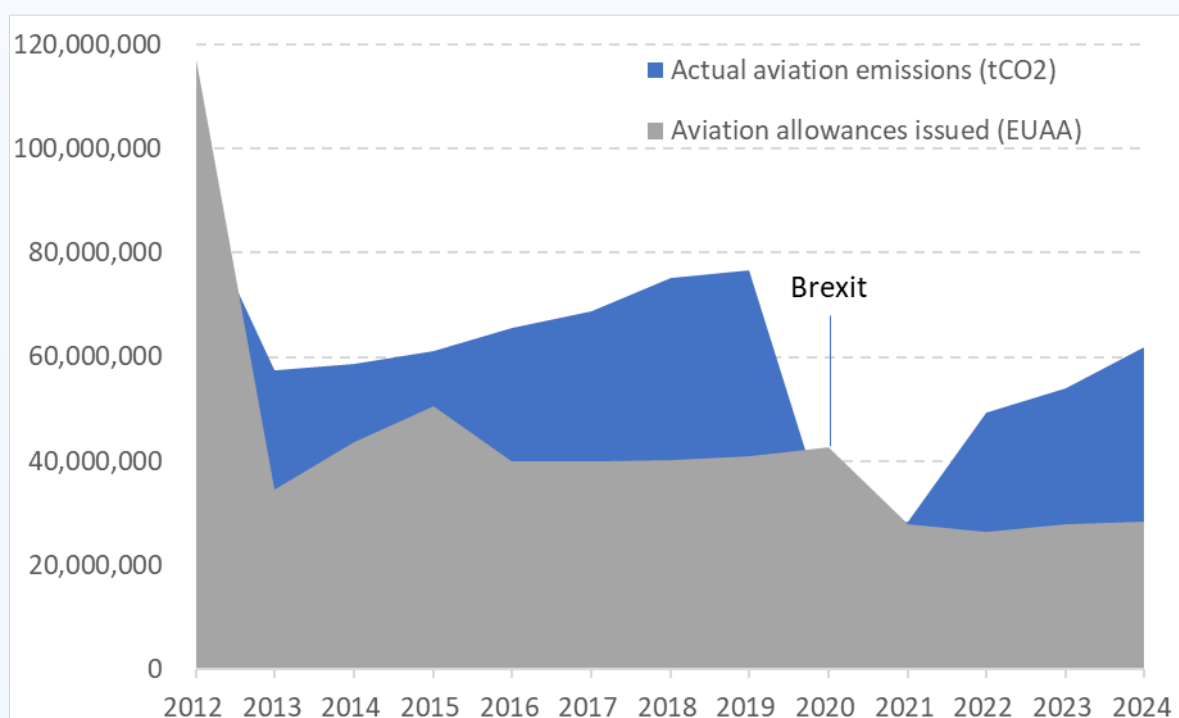
Putting a seat belt on allowance use: How aviation could do its part

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Policy brief

Aviation was included in the EU's Emissions Trading System (ETS) in 2012, initially covering all flights departing from the EU, then restricted to intra-EU flights from 2013 onwards. Ever since, aviation has failed to stay within its carbon budget, emitting more CO₂ than its allocated allowances, except in 2020-21 due to Covid-19. In 2024, aviation exceeded its carbon budget by 119%, at 62 million tonnes of CO₂.



Aviation has so far complied with its EU ETS obligations thanks to the possibility for airlines to surrender “straight” allowances (EUA) alongside aviation allowances (EUAA), to fill their deficit. In 2025, aviation allowances were abolished and only EUAs are now issued for both aviation and other sectors. But the imbalance between aviation and other sectors remains, making aviation an increasingly large **net buyer of allowances** from other sectors.

We propose that **access by airlines to allowances from other sectors should gradually be reduced.**

EUA demand take-off

We estimate that aviation’s net demand has been 248 million EUAs over 2012-2025. In the next decade, aviation’s net demand will greatly depend on the sector’s decarbonisation, as illustrated by the table below. The table gives the net aviation demand corresponding to each of the emissions scenarios (S1, S2 and S3) used in the impact assessment (IA) published by the European Commission in 2024 as part

of the EU Climate Law, to which we added a scenario where emissions simply remain constant between 2024 and 2040.

These figures do not account for the Commission's proposal to extend the ETS to extra-EU flights within a 5000-kilometer radius, because the impact of that proposal on market balance depends on many factors and in some cases would not be significant.

2040 emissions scenario	2040 EU ETS emissions (mt CO ₂)	2040 aviation emissions (mt CO ₂)	Aviation net demand 2031-2040 (mEUA)
IA S3 (-95%)	177	28	261
IA S2 (-85%)	273	29	268
IA S1 (-75%)	443	31	283
2040 = 2024	N/A	62	503

(Source: Sandbag)

In the IA's scenarios, aviation emissions are reduced by at least half compared to their 2024 level. In these cases, the sector's net demand is between 261-283 million over 2031. However, given the lack of incentives to curb emissions in the current regime, the constant emissions scenario is not unrealistic. Intra-EU flights would then be responsible for 22% of overall ETS emissions. In this case, **aviation net demand would total 503 million EUA** over 2031-40.

This is more than twice the **2040 cap set at 243 million tCO₂** under the Commission's proposal. It is also a large share of the surplus (EUA in circulation + in reserves) expected under different option designs, as illustrated in the following table¹.

ETS feature	Scenario S2 : EU ETS surplus by 2040 (m EUA)
Commission's proposed cap	736 (incl. 400 MSR)
+ 260m EUAs to purchase removals	996
+ proposed MSR rules	1,100
+ no invalidation	1,540

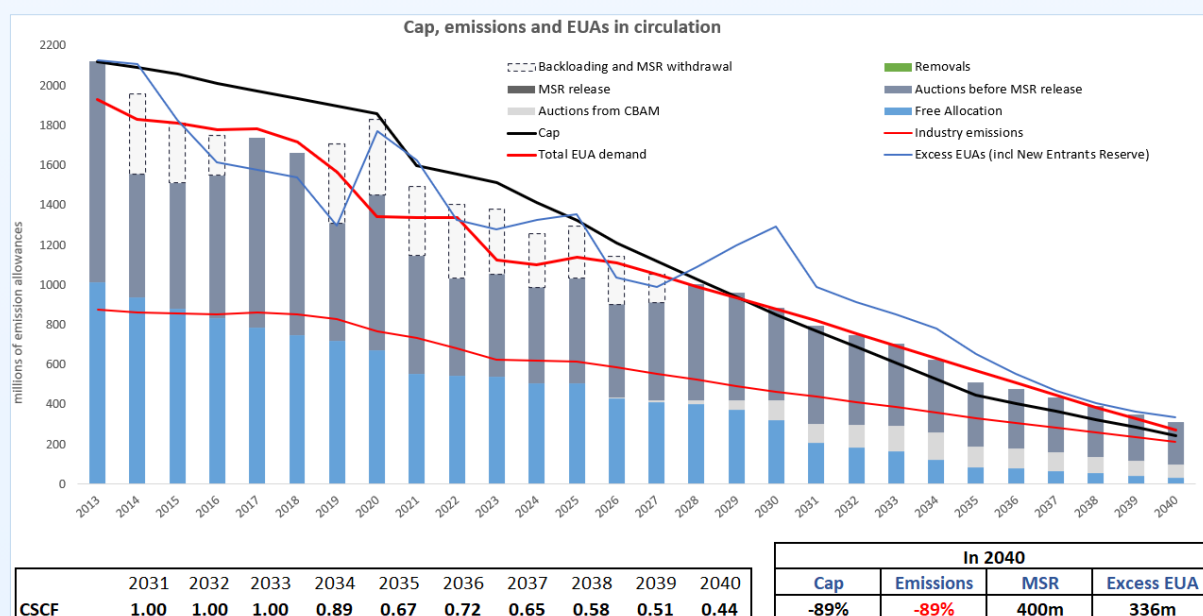


Figure 1: Supply and demand for EUAs in scenario S2, under the Commission's proposed cap (Source: Sandbag's EU ETS Simulator)

¹ Sandbag (2026), [EU ETS review: impacts on the market balance](#)

Figure 1 represents the supply and demand balance under emissions scenario S2, assuming the Commission's proposed cap and leaving other design options unchanged. The surplus is 736m allowances at the end of 2040, including 400m in the MSR. In Figure 2, net EUA purchases by airlines are linearly reduced from about 30 million in 2030 to zero in 2040. **The ETS surplus increases to 869 million EUAs, including 400 million in the MSR.**

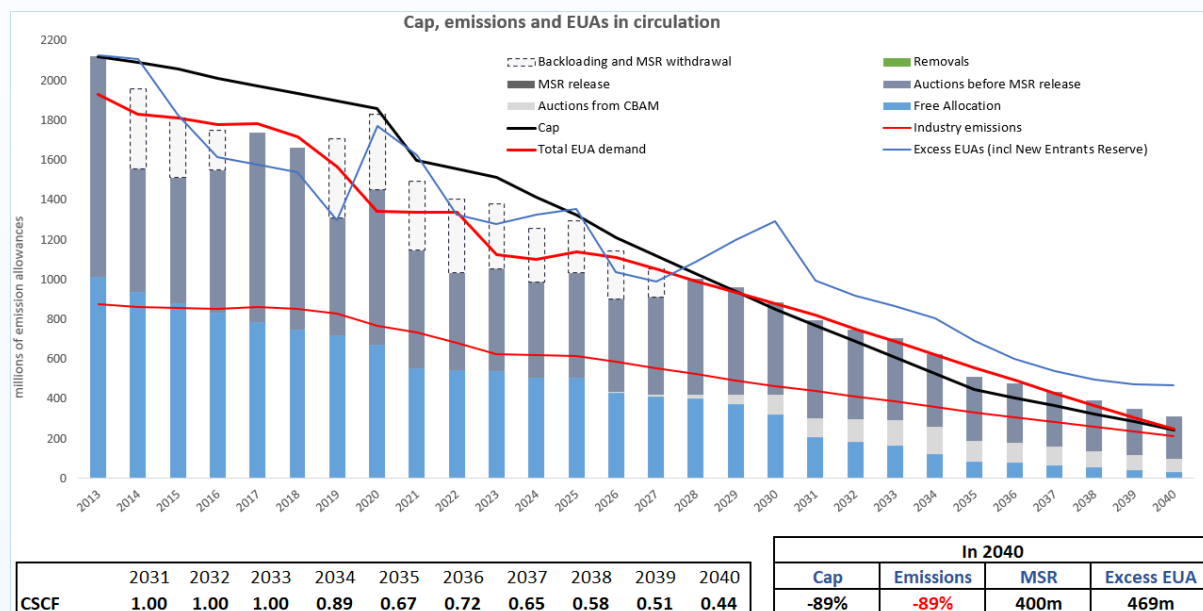


Figure 2: Supply and demand if aviation's annual access to EUAs linearly drop from 30 million to zero between 2030 and 2040 (Source: Sandbag's EU ETS Simulator)

Flying economy

By purchasing emission allowances from stationary installations, airlines essentially **offload the decarbonisation burden onto (mainly) industry sectors**. The extra demand created by airlines drives prices up for those other sectors. The large uncertainty over the share of aviation in tomorrow's EU ETS, including its possible extension, creates additional risk for industrial sectors exposed to international competition.

In contrast, for the aviation sector, buying allowances is cheaper than reducing emissions. The sector's unlimited access to allowances acts like an abatement deterrent, **making decarbonisation the least economical option**. Decarbonisation options such as the use of e-fuels are notoriously expensive, with estimates as high as €500 per tonne of CO₂ reduced². In comparison, EUAs cost only about €80 for 1 tonne of CO₂. Transfer to rail transport is also expensive, as train ticket prices are sometimes several times more expensive than air fares for equivalent journeys within Europe. In contrast, the relative cost of EUAs on air fares on some destinations was estimated as only 0.9%³.

For the EU ETS to trigger any meaningful air travel decarbonisation, allowance prices would therefore need to reach levels **several times higher than what they are now**.

Luckily, unlike industrial goods, air transport is not importable, so increasing emission allowance prices for air transport would not unfairly favour foreign competitors offering similar services. The Commission's proposed extension of the EU ETS to international flights would not change this analysis, as the extension would create virtually no carbon leakage risk⁴.

² Based on prices of €800 fuel cost and 3.15 tonnes of CO₂ emitted per tonne of kerosene used vs. €2500 for e-kerosene.

³ CE Delft (2026) [EU ETS scope expansion for aviation - Effects on ticket prices and demand](#)

⁴ Transport & Environment (2023), [Flying via Istanbul: escaping climate measures?](#)

At high allowance price levels, substitution by ground transport might happen. But such activity, which relies more on domestic infrastructure and less on fuel imports, would be more beneficial to the EU's economy.

High allowance prices for aviation would raise more funds. These funds could be invested in e.g. rail infrastructure, which would reduce the cost difference between air and rail transport. A better rail network would help the EU to catch up with China's competitive transport system.

Bringing back EUAA

Restricting access by airlines to stationary allowances can be done in a number of ways. One possibility is to resume the issuance of EU Aviation Allowances (EUAAAs) for aviation and allow airlines to cover their emissions using **EUAAAs plus a limited percentage of EUAs**.

Such restriction would effectively create two distinct markets for EUA and EUAA, allowing EUAAAs to trade at much higher prices than EUAs: EUAA prices would be driven by the marginal cost of air travel abatement necessary to meet a reduced carbon budget, whereas EUAs would trade at lower prices than if keeping unlimited access to airlines.



The background features a white central area framed by dark blue geometric shapes: a triangle in the top-left, a triangle in the bottom-right, and a horizontal bar at the top. On the left and right sides, there are faint, light blue concentric circular lines that appear to emanate from the edges.

sandbag
smarter climate policy