

# Emission Trading System - Aviation

## T&E's feedback on the Inception Impact Assessment

August 2020

### Summary

While every other sector's climate emissions have decreased since 1990, transport emissions have increased by almost 30% and **aviation emissions have more than doubled**. If the European Green Deal is to radically reduce the EU's climate impact, it has to reshape [European aviation](#) by using all necessary carbon pricing tools at its disposal, including revising the Emission Trading System (ETS).

The European Commission should ensure that it defends the EU ETS as the main tool to regulate aviation emissions, and further strengthens its ambition, especially if it wants to guarantee aviation's sustainable recovery post COVID19. As a result, it should not integrate ICAO's cheap and environmentally ineffective carbon offsetting scheme (Corsia) into EU law at the expense of its own climate targets for aviation. This paper contains T&E's views on the main elements to take into account for the next revision of the ETS for aviation in 2021. These recommendations aim at making the ETS better and bigger, which include:

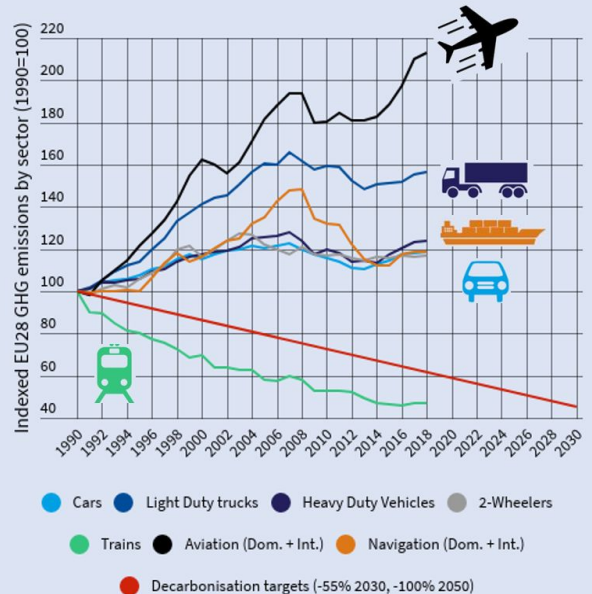
#### 1. Strengthening the EU ETS for aviation by:

- Removing free allowances for aviation and using the revenues to develop & deploy clean fuels
- Applying discounting factors to aviation emissions
- Reducing the aviation ETS cap & limiting the use of allowances from the stationary ETS
- Establishing a minimum price for CO<sub>2</sub> allowances
- Enabling voluntary cancellation of allowances by member states to take into account any future reduced aviation demand

#### 2. Countering any international attempts to undermine the ambition of the EU ETS as a tool to regulate aviation emissions

- Consider options to reintegrate long haul aviation emissions through the ETS
- Reject any attempts to replace the EU ETS by Corsia's ineffective offsetting scheme
- Assess the possibility of applying both ETS & Corsia on the same routes

### Aviation: biggest effort to reach -55% 2030 target among all transport modes

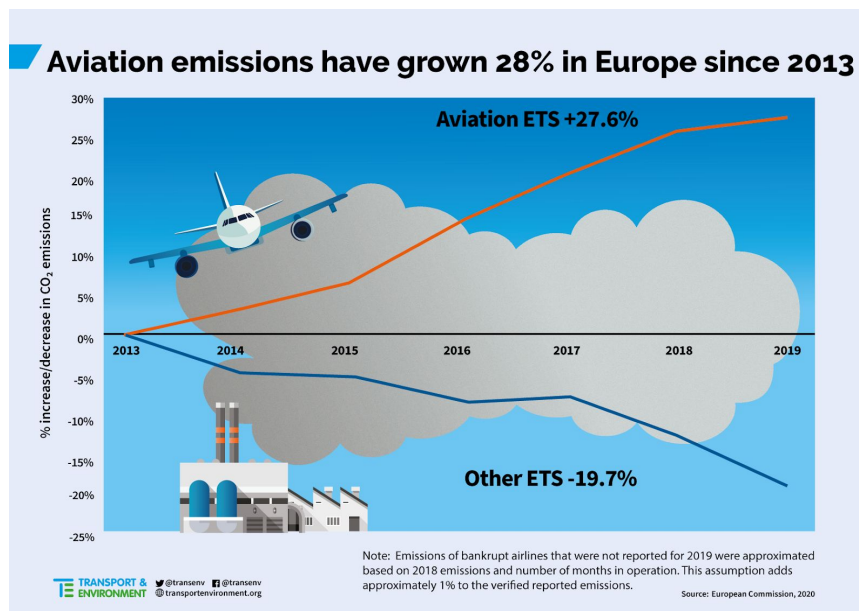


Data source: Member State reporting to the UNFCCC. 2018 data from EEA proxy GHG emission database.

# 1. Aviation emissions expected to continue rising post COVID19 without effective carbon pricing

Aviation emissions continued soaring right up until the start of the COVID19 crisis. In 2019, CO2 emissions from European aviation increased by 1.5% compared with a 8.9% decrease from all other sectors covered by the ETS (the stationary installations such as coal, steel and concrete plants). Since 2013, European aviation emissions have increased 27.6% compared to a 19.7% decrease for other sectors in the ETS.

Although all sectors must decarbonise, the aviation sector has so far escaped its responsibility compared to other sectors. **It will be increasingly socially and politically untenable for the aviation sector to continue to grow despite measures in place to decarbonise other sectors.**



Despite COVID19 causing a temporary fall back in aviation traffic, aviation's emissions are expected to bounce back once the crisis recedes, unless the sector begins to effectively pay for its actual impact on the environment. Industry data has shown that passenger numbers have repeatedly broken records in the aftermath of global shocks such as the 2008 financial crisis.<sup>1</sup> Despite the limited contribution of aviation to national budgets in normal times, governments across Europe have agreed to **at least €32 billion in bailout support for the sector with environmental conditions in only a limited number of cases.** Without pricing policies that encourage fairer fares, emissions of the sector will continue soaring like they did right up until the start of the COVID19 crisis, especially as some airlines<sup>2</sup> are already expecting to engage in price wars to stimulate passenger traffic, further cheapening the price

<sup>1</sup>Boeing, Commercial Market Outlook 2018-2019.

<sup>2</sup>Yahoo Finance (June 2020), [Coronavirus: Wizz Air promises 'ultra low fares' as price war looms](#)

of flying. Airlines have also claimed to be “international” in nature, requiring climate policies to be established at international level (i.e. the UN aviation agency, ICAO). However their reliance on national support during the Covid19 crisis belies this myth.

A number of reports have shown that flying remains a mode of travel that is used by a limited number of citizens, in the UK for example, 70% of all flights are taken by 15% of the population<sup>3</sup> and only 4% of the German population engages in five or more holiday trips per year<sup>4</sup>. The impact of carbon pricing is expected to mostly impact parts of the population with higher incomes, as the vast majority of flights are taken by frequent flyers<sup>5</sup> who can more easily absorb the extra cost or afford other modes of travel. Analysis<sup>6</sup> shows that in Europe, **households with the highest carbon footprints are by large the households with the highest levels of income and expenditure**, and that the **contributions of air transport is disproportionately large among the top emitting households**. The same research shows that any action to address the carbon footprint of aviation is likely to **affect those with the highest incomes and expenditures most**. Therefore when considering the social implications of reforming the EU ETS, the European Commission should understand that increasing the cost of air travel is likely to impact mostly a wealthier part of the population, who fly often and can take on the impact of effectively paying for their pollution.

In view of better addressing aviation’s climate impact, the revision of the EU ETS should make it better (2) and bigger (3), strengthening its key features while extending its scope.

## 2. Time to strengthen the EU ETS for aviation

Allowances under the ETS, in 2019, [traded at](#) €25 on average and airlines received a large portion of their emission permits (32 million, almost half) for free. This resulted in a cost to airlines of around €900 million a negligible cost given that airlines benefit from a jet fuel tax exemption estimated at [€27 billion a year](#) if applied to all European outbound (intra and extra-EU) flights. Combined with the fact that only flights within Europe are included in the EU ETS, accounting for only around 40% of the regions’ emissions<sup>7</sup>, **the ETS for aviation needs to be revised to align the price of flying with its actual environmental impact**.

### ● Getting rid of free allowances for airlines

The airline sector received an estimated 32.3 million tonnes<sup>8</sup> of free allowances in 2019. President Von der Leyen’s European Green Deal has committed to reducing these free allowances, a move already

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<sup>3</sup> [A free ride](#) (2020), [Infographics](#)

<sup>4</sup> Stefan Gössling, Martin Lohmann, Bente Grimm, Daniel Scott (2017), [Leisure travel distribution patterns of Germans: Insights for climate policy](#)

<sup>5</sup> Independent (September 2019) [Only the rich fly regularly – and now they've got to pay to tackle climate change](#)

<sup>6</sup> Cambridge University, Diana Ivanova & Richard Wood (June 2020), [The unequal distribution of household carbon footprints in Europe and its link to sustainability](#)

<sup>7</sup> EASA (2018) [Figures and Tables | European Aviation Environmental Report](#)

<sup>8</sup> T&E (2020), [State of the Aviation ETS](#)

encouraged by several member states. The principle of free allocation was implemented to counter the risk of carbon leakage, where production moves from the EU to third countries. But the principle of carbon leakage does not apply to the aviation sector, as the “product” (i.e. transporting passengers) cannot be “moved” to another third country.

In order to ensure the EU ETS is in line with the EU’s 2030 increased climate objectives, the European Commission should propose **to move towards full auctioning of allowances for aviation as soon as possible, as requested by Poland<sup>9</sup> earlier in 2020**. On top of ensuring airlines pay the real price for their pollution, abolishing free allocation would also reduce administrative costs both for airlines and member states as there would be no need for benchmarking anymore and all airlines would be treated equally.

The revenues generated by putting an end to 32.3 million tonnes of free allowances could help finance **contracts for difference (CfD) promoting the development and use of sustainable alternative fuels<sup>10</sup>**. These CfDs are agreements whereby public subsidies are used to meet the gap between what it costs to produce such a fuel, and what the market is willing to pay. CfDs have been used effectively in the past to support novel alternative technologies such as renewable electricity (wind, solar), and through an auctioning process can be awarded to the producer offering the lowest cost, therefore ensuring public money is put to the most efficient use.

- **Reducing the aviation ETS cap & limiting the use of allowances from stationary ETS**

Currently the cap for aviation is set at 95% of average 2004-06 emissions until 2020, meaning that aviation ETS allowances (EUAs) available to buy for airlines are limited. But in reality this is not a hard cap on aviation emissions, because airlines are free to go over this aviation cap, by buying allowances from the stationary sector (EUAs). The relative size of the aviation sector compared to the stationary market and the willingness to pay for transport by consumers means that there is in effect an unlimited supply of allowances for air transport. Currently around 50% of the surrendered allowances from aircraft operators come from the stationary ETS.

However, the impact of COVID on aviation emissions in 2020 and the rate at which the industry is likely to bounce back<sup>11</sup>, coupled with growing deployment of technology and societal shifts from air travel, creates an opportunity to make 2019 the “peak” year for aviation emissions in Europe, and that peak should be reflected in the scheme’s cap.

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<sup>9</sup> Council of the EU (2020), [Implementation of full auctioning for the aviation sector under EU ETS](#)

<sup>10</sup> T&E (2020) [Legislating for aviation alternative fuels](#)

<sup>11</sup> ACI Europe (2020) [European airports revise recovery projection to 2024 whilst reporting only marginal traffic increase for June](#)

**In order to ensure aviation emissions' growth is limited, the aviation cap could be further reduced for 2030 and the possibility for airlines to buy EUAs could also be limited.** From 2021 onwards the linear reduction factor (LRF) applied in the stationary ETS also applies for the aviation sector, which would lead to the 2030 cap being 27% below the historic value (2004-2006). Decreasing the rate of available allowances to buy by increasing the LRF to 3.8% instead of the current 2.2% could help further lower this cap and increase the rate of aviation emissions reduction. In addition, a limit on the quantity of allowances from the stationary sector that airlines can buy, would also introduce a hard cap on aviation emissions. Given that airlines can today buy as many EUAs as needed to cover for their growing emissions, by limiting the number of EUAs they can purchase, airlines would be forced to cap their emissions. This would be a way to ensure 2019 remains the peak year for aviation emissions and would provide certainty for all operators on the reduction pathway to take in the medium to long term.

- **Applying a multiplier to aviation emissions**

In order to further encourage emissions reduction in the sector and also address irregularities in the way the sector has been treated over the past years, **a multiplier could be applied to increase the amount of allowances airlines would actually need to surrender.** This would drive emissions reductions by creating sufficient price signals to contribute to the achievement of carbon neutrality in aviation by 2050. The Market Stability Reserve (MSR) should however take into account demand from aviation with these discounting factors, in order to adapt the amount of allowances it would need to absorb and avoid having a surplus or a shortage of allowances on the market. There could be two main arguments justifying the use of a multiplier for aviation emissions:

- ❑ **Compensation for lack of kerosene taxation:** The minimum kerosene tax of 33 cents/litre in the Energy Tax Directive equals a CO<sub>2</sub> price of 130 EUR/ton. Based on the current CO<sub>2</sub> prices a discounting factor of 5 could be applied to compensate for the energy tax exemption for kerosene fuel.
- ❑ **Compensation for non-CO<sub>2</sub> impact of aviation:** Aviation's impact on global warming is estimated to be 3-5 times higher than the effect of its CO<sub>2</sub> emissions alone, a discounting factor of 3 could be applied, as flights covered by the ETS have lower non-CO<sub>2</sub> impacts than long distance flights.

- **Minimum price for CO<sub>2</sub> allowances**

In order to ensure the ETS price signals resist any excessive fluctuations caused by future crises, a minimum price for auctions could be implemented both in the aviation and the stationary sector. The price could be set in a way that it increases over time and thus also reducing uncertainty for investors whether emission abatement technologies will be economical. The UK introduced a minimum CO<sub>2</sub>

price for energy installations covered by the ETS in 2013, and this contributed to reducing the carbon intensity of the UK's energy mix by phasing out investments in coal<sup>12</sup>.

- **Voluntary cancellation of allowances**

Under Art. 12(4) of the ETS Directive member states have the right to voluntary cancel allowances in the event of a policy driven coal phase out. Such a voluntary cancellation ensures that no other power plant can use the newly available certificates from the closed installation to increase emissions and output. The right to voluntary cancellation could be expanded to the aviation sector, for example to take into account reduced demand for aviation, when air travel shifts to rail, or whenever member states withdraw subsidies for regional airports.

### 3. Integrating Corsia without undermining the EU ETS

- **International distractions will not solve aviation's climate problem**

Due to issues inherent to offsetting and Corsia's lack of environmental integrity, integrating the system in Europe represents a threat to its existing climate commitments under the Paris Agreement (read more of our analysis [here](#)). **Implementing Corsia only instead of the ETS should not even be an option for the revision of the EU ETS**, given its expected inability to address growing aviation emissions.

**Offsetting allows for aviation to continue polluting:** Corsia relies on airlines buying offsets to compensate for their emissions growth, which will [never be enough](#) to offset the known damage of flying. The fact that Corsia does not include an actual reduction target is also at odds with the Paris agreement goals and the European Climate Law proposal, where all sectors of the economy are expected to contribute to a climate neutrality objective by 2050. Offsetting is also in contradiction with the functioning of EU ETS, as international offsets cannot be used for ETS compliance as of 2020.

**Corsia's oversupply of cheap offsets will not incentivise aviation to reduce emissions:** Current and potential supplies are [expected to be between 2 and 4 times higher](#) than demand estimated in the International Air Transport Association's (IATA) latest COVID19 scenarios. With offsets expected to cost a few cents, the financial impact of Corsia for airlines is expected to be minimal. ICAO even [expected](#) the cost of compliance to range between 0.2 to 0.6% of total revenues from international aviation in 2025. In comparison, the carbon price in the EU's ETS averaged around 25€/tonne CO2 in 2019 and according to the European Commission's own [Inception Impact Assessment](#), even these carbon prices have 'so far led to estimated minimal increases in airfares' which in turn fail to encourage a shift to cleaner modes of transport.

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<sup>12</sup> House of Commons (UK) (2018) [Carbon Price Floor \(CPF\) and the price support mechanism](#)

**Corsia's COVID baseline change renders the scheme ineffective for the next 5 years (at least):** By changing Corsia's baseline year to 2019 only and depending on the rate at which the industry is expected to bounce back after COVID, airlines will likely [not have any offsetting requirements](#) in the pilot phase (2021-2023), and possibly even in the first phase of the scheme (2024-2026). So Corsia is expected to further delay mitigation obligations for the industry by several years at least until 2027 when the mandatory phase starts. In addition, as explained above, if 2019 is the peak year for aviation emissions, Corsia will be rendered useless, as airlines would never have emissions above 2019 levels to compensate for. However, if air traffic and emissions bounce back above 2019 levels, it is key to ensure the ETS is strengthened and broadened as Corsia will never provide enough of an incentive to reduce aviation emissions, which is why options to integrate Corsia in the ETS are limited.

- **Limited options to integrate Corsia into the EU ETS**

The European Commission's IIA includes different options to integrate Corsia in EU law, however very few of these actually have the ability to fully address aviation's climate impact.

- ❑ **Option 1** (ETS full scope): Given Corsia and ICAO are failing to deliver an effective scheme to account for extra-EU aviation emissions, the EU could show true environmental leadership by strengthening the ETS and reverse the "Stop the Clock" clause to re-integrate extra-EU emissions until Corsia actually starts requiring airlines to reduce emissions. In order for ICAO to have a stronger incentive to deliver on climate, the EU should start as of 2021 reintegrating extra-EU emissions in the ETS up until at least 2027, if and whenever Corsia becomes effective & mandatory.
- ❑ **Option 2** (No Corsia): Corsia's flaws should encourage the Commission to re-integrate extra-EU emissions into the ETS. By not addressing extra-EU aviation emissions at all, the Commission would continue to ignore long haul aviation's climate impact, which actually contributes heavily to aviation pollution, given it causes of aviation's CO2 emissions (60%) and non-CO2 emissions<sup>13</sup>.
- ❑ **Option 3** (only Corsia): As stated above, applying only Corsia as a tool to reduce emissions is contrary to the EU's climate ambition and legislative autonomy.
- ❑ **Option 4** (ETS/Corsia clean cut): Despite being logical on paper because it ensures the EU ETS continues to apply on intra-EU routes and Corsia on extra-EU routes, this option would still deliver much less benefits from a climate perspective than option 1, given that Corsia itself will not actually incentivise the sector to reduce its emissions on extra-EU routes, despite it constituting the major bulk of EU aviation emissions.

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<sup>13</sup> T&E (2019), [Why is aviation's true climate impact being kept under the radar?](#)

- ❑ **Option 5** (ETS/Corsia mix): This option would lead to the EU ETS no longer applying on intra-EU routes when airlines report emissions above 2020 levels and instead use Corsia's ineffective offsetting scheme to address intra-EU emissions. This not only undermines the EU's legislative autonomy when it comes to regulating its own aviation emissions but also goes against the EU's ambition to be climate neutral by 2050, as it would acknowledge aviation emissions can continue growing indefinitely. This option should not be considered as a policy choice.

Another mix option would be to apply the ETS to intra and extra EU routes with airlines having to respect ETS obligations until emissions go above 2019 levels. Of course intra-EU emissions would still only be covered by the ETS, but on extra-EU routes, whatever is above 2019 levels would then become part of airlines' Corsia offsetting obligations. This would also match Corsia's change of baseline year.

Ultimately, Europe's climate policy should be about peaking and cutting aviation emissions from a 2019 level. An effective ETS can achieve this through a hard cap and decline in a way that Corsia's ineffective offsetting cannot.

- ❑ **Option 6** (ETS/Corsia mix based on licence of operators): This option could lead to a difference in treatment between third country and European operators, despite them operating on the same territory. Addressing aviation emissions should be based on routes operated by airlines instead of their country of origin.

The IIA mentions the possibility of assessing other options to integrate Corsia, T&E would suggest evaluating **the possibility of applying Corsia and the EU ETS on intra and extra EU routes**. Given the international scheme's limited cost impact, especially given recent developments related to COVID19, T&E believes the Commission should analyse the actual cost of applying both schemes.

## 4. Policy recommendations

T&E recommends that the European Commission takes into account the policy recommendations below when revising the EU ETS rules for aviation, in order to make the EU ETS for aviation better and bigger.

- ❖ **Strengthening the EU ETS for aviation by:**
  - Removing free allowances for aviation and using the revenues to develop and deploy SAF
  - Applying discounting factors to aviation emissions
  - Reducing the aviation ETS cap & limiting the use of allowances from the stationary ETS
  - Establishing a minimum price for CO<sub>2</sub> allowances
  - Enabling voluntary cancellation of allowances to take into account any future reduced aviation demand



- ❖ **Countering any international attempts to undermine the ambition of the EU ETS** as a tool to regulate aviation emissions
  - Consider options to reintegrate long haul aviation emissions through the ETS until Corsia actually starts requiring airlines to purchase quality offsets (not before at least 2027)
  - Reject any attempts to replace the EU ETS by Corsia's ineffective offsetting scheme (i.e. options 3, 5 and 6 of the Inception Impact Assessment)
  - Assess the cost impact of applying both ETS & Corsia on the same routes given the change to Corsia's baseline year due to COVID19 has further cheapened the scheme, resulting in next to no financial impact for complying airlines

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## Further information

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