

## 【欧州】 【航空】

# Aviation - Gas emissions: Considering the introduction of a kerosene tax or other taxation as competitive and environmental measure in the EU's aviation sector

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### 【概要 : Summary】

The aviation sector is responsible for about 3% of the EU's total GHG emissions and more than 2% of global emissions. By 2020, global international aviation emissions are projected to be around 70% higher than in 2005. The International Civil Aviation Organization (ICAO) expects that until 2050, the GHG emissions of aviation could grow by a further 300-700%. Although there exist CO2 emission reduction measures like the EU's Emissions Trading System (EU-ETS) for aviation in the EU, the overall CO2 emissions from the aviation sector and its intra-EEA flights covered by the EU-ETS have risen by 26% since 2012. One of the main problems within the EU-ETS for aviation is that the airlines receive a large number of emission permits for free. This does not help to incentivise CO2 emission reduction measures. Furthermore, the planned introduction of the ICAO's Carbon Offset and Reduction Scheme for International Aviation (CORSIA) to reduce CO2 emissions in aviation is considered being too weak to significantly cut the aviation sector's CO2 emissions.

Therefore, additional efforts are needed to address the increasing level of the aviation sector's CO2 emissions. Currently, discussions are intensifying to end the competitive advantages of the aviation sector that arises from the fact that this sector is exempted from the kerosene tax. At the same time, more

environmentally friendly modes of transport such as railways are covered by taxation. Moreover, the external costs of aviation are currently not sufficiently considered as factor in the pricing mechanisms and consequently, the aviation sector's external costs are carried by the entire society. The fair and correct pricing of air transport and to end the taxation advantage are important elements to reach a level playing field with the other sectors.

Despite various attempts over the past two decades, aviation is still not subject to any fuel tax or VAT-style taxes. All aviation fuel used in the EU is exempted from taxes also on European domestic flights and intra-EU flights although taxation would be permitted under the 2003 Energy Taxation Directive (ETD).

However, recently, there have started initiatives among EU Member States, and the European Commission has studied the possibility of levying taxes for fuels or tickets in the aviation sector. The option could be to introduce a levy on kerosene or to introduce a EU-wide tax on tickets for passengers on domestic or intra-European flights. Expectations are that this could help to accelerate the transition to a cleaner European mobility and to improve the level playing field with other, more environmentally friendly transport modes.

## 【記事 : Article】

### 1. Measures to limit CO2 emissions in aviation

Under the Paris agreement 2015, the EU agreed to implement its part of measures to limit global warming to 1.5° C. Accordingly, the EU Member States have committed through their Nationally Determined Contribution (NDC) to reduce their GHG emissions by at least 40% by 2030 compared to 1990. However, according to the United Nation's November 2018 Emissions Gap Report, the current commitments expressed in the NDCs are inadequate to reach the 2030 target, and the limit of 1.5° C of global warming. After three years of stagnation, global CO2 emissions increased in 2017 and therefore, NDC ambitions have to be increased.

According to the European Environment Agency (EEA)'s second European aviation environmental report (EAER) 2019, providing an updated assessment of the environmental performance of the aviation sector, the aviation activity impacts on to climate change, noise and air quality continue to increase. According to the EAER report, despite the operational and technological improvements and the coverage of the European Economic Area's aviation by the EU-ETS, the CO2 emissions of all flights departing from the EU28 and EFTA increased from 88 to 171 million tonnes (+95%) between 1990 and 2016. In 2016, aviation was responsible for 13.4% of the transport sector's GHG emissions. By 2040, CO2 and NOx emissions are predicted to increase by at least 21% and 16%, respectively.

Aviation had not been in the focus of the climate change debate, as aviation and shipping were excluded from the Kyoto and Paris climate-change agreements. However, the EU will have to introduce additional measures to improve the aviation sector's performance in order to prevent a further GHG emission increase.

### 2. The EU-ETS for aviation and ICAO's CORSIA

Currently, the main CO2 emission reduction instrument for aviation in Europe is the EU-ETS. Under the EU-ETS for aviation, all airlines operating in Europe, European and non-European alike, are required to

monitor, report and verify their emissions for their flights within the EEA. The system has so far contributed to reducing the carbon footprint of the aviation sector by more than 17 million tonnes per year, with compliance covering over 99.5% of emissions. Airlines receive a large number of permits for free (representing 32.6 Mt of CO2e in 2017) under the EU-ETS for aviation. However, since the number of permits allocated to airlines is not enough to cover their emissions, in 2017, airlines purchased 26.8 million permits. In a perfectly functioning system, airlines would start taking measures to reduce their GHG emissions and their costs for purchasing the permits. Consequently, GHG emissions would decrease. However, in reality, the EU-ETS is oversupplied with permits and the permit price is low. As a result, airlines do not only receive half of the permits for free, but the rest of the necessary permits can be purchased at a very low price, due to the oversupply of permits. In 2017, the total cost of complying with the EU-ETS for airlines was estimated at EUR 189 million, representing only about 0,3% of the airlines' operating costs for the flights covered. Consequently, the EU-ETS for aviation does not generate significant enough incentive for the aviation sector to significantly reduce its CO2 emissions.

Regarding CO2 emission reduction measures at global level, in October 2016, the ICAO agreed on a Resolution for the introduction of a global market-based measure to address CO2 emissions from international aviation as of 2021. The ICAO's CORSIA scheme aims to stabilise CO2 emissions and will start in 2021 with a first voluntary pilot phase. However, since CORSIA is unlikely to set any meaningful price incentive for the aviation sector to decarbonise, the scheme is not expected to improve the aviation sector's sustainability. At best, CORSIA will achieve a carbon natural growth (CNG) in the 2020-2035 period.

### 3. Considering approaches for introducing a tax regime for aviation in the EU

While the EU-ETS for aviation and the ICAO's CORSIA seem to have only limited positive impacts on reducing

the CO<sub>2</sub> emissions from air travel, recently, EU Member States have started discussions to introduce an intra-EU tax on kerosene and other taxation options. Aviation has a unique taxation regime, as airline tickets are generally exempt from VAT. Although domestic aviation is often subject to VAT on tickets, there is no excise duty or VAT levied on fuels in the EU.

Since the EU introduced the 2003 Energy Taxation Directive (ETD), most fuels and energy products in the EU are subject to taxes and also aviation fuel used in the EU could be taxed under the ETD. However, Article 14 of the ETD permits EU Member States to continue to exempt aviation fuel for domestic, intra and extra-EU flights from taxation. These exemptions are historically based on the ICAO's 1944 Chicago Convention (Article 24), which provides that states should admit aircraft temporarily free of duty and that fuel shall be exempt from customs duty. While the taxation of aviation fuel already on board of an arriving aircraft of international flights should not be taxed, the EU Member States would be entitled to tax aviation fuel for domestic aviation or, through bilateral agreements with other Member States, on intra-EEA flights.

Some EU Member States, including Austria, Denmark, Finland, France, Ireland, Italy, Luxembourg, Netherlands, Sweden, Switzerland and the UK, have already introduced distance-related flight ticket taxes. Malta abolished its air transport levy in 2006. However, these levies on tickets are considered being too low to stimulate any technological innovation towards GHG emissions reduction, as their impact is too weak to change consumer behaviour.

These surcharges on air tickets only partially offset competitive advantages resulting from tax exemptions for air transport compared to other, more environmentally friendly modes of transport.

Therefore, some EU Member States and transport associations as well as environmental groups call for the introduction of some kind of kerosene or passenger tax at national or European level, which would eliminate the selective tax advantage for the

aviation sector. The aim is to improve the conditions of fair competition between modes of transport, in order to reach a fairer level playing field between transport modes. It could also achieve an inclusion of environmental externalities in air transport tariffs. The air transport's significant external costs including accidents, atmospheric pollution, noise, and, above all, damage to climate and to public health are so far not reflected in the pricing mechanisms in aviation and are carried by society as a whole. A kerosene tax or another fee on passengers flights would be a way to charging these external costs under the "polluter pays" principle.

#### **4. First steps towards EU-wide levy on aviation fuel?**

According to the CE Delft study entitled "Taxing aviation fuels in the EU" of November 2018, there exist legal options for introducing a fuel tax to all carriers operating within Europe. The EU could introduce taxation for domestic aviation or, by agreements with other Member States, on intra-EU flights. Aircraft operators registered in a non-EU Member State, which also sometimes operate on intra-EEA routes, would be subject to separate bilateral air service agreements that prohibit both States from taxing fuels. Besides the problem that such a different treatment could potentially distort the competitive market, the report's legal analysis shows that it appears possible for EU Member States to tax aviation fuels on flights between Member States even if non-EU carriers are exempted from a fuel tax. Also, ticket taxes could be levied for each passenger flying between Member States, where the tax is applied, with the airline being responsible for collecting the tax. If the tax were passed on to passengers, would also depend on the pricing-decision of the airline. The introduction of a levy on aviation fuels would have a positive effect on restoring a level playing field between transport modes and it could create incentives for airlines and aircraft manufacturers to invest into low fuel consumption and low-emission technologies.

In the EU, taxation matters are an exclusive competence of the individual EU Member States. Therefore, attempts to impose EU rules would need unanimous approval from all EU Member States. On 12 February 2019, at the European Economic and Financial Affairs (ECOFIN) meeting, the Dutch State Secretary for Finance Menno Snel raised the idea of taxing kerosene and provided information on the Dutch initiative to hold an international conference on carbon pricing in the aviation sector on 20–21 June 2019. The Dutch Government advocates the introduction of a European Union-wide levy on aviation fuel or on aircraft passengers to help to offset the environmental cost of flying. The EU finance ministers gave a tentative support to the idea of a EU-wide tax on aviation fuel. The Belgium Walloon Minister for the Budget, Finance, Energy, Climate and Airports Jean-Luc Crucke called for a European pricing system, which takes also into account the externalities of air transport, while establishing a fair competition with other forms of transport. He asked the Council's presidency, Romania, to organize a debate on introducing a tax regime to aviation. Also the EU Environment Council on 5 March 2019 discussed the topic of tackling GHG emissions in aviation by pricing. The Belgium proposal during the Environment Council gained the support of France, Sweden, Luxembourg and the Netherlands, and no country openly opposed the idea.

Furthermore, on 30 April 2019, the European Commission decided to register a new European Citizens' Initiative on "Ending the aviation fuel tax exemption in Europe". This European Citizens' Initiative calls on the Commission 'to propose to the EU Member States the introduction of a tax on aviation fuel (kerosene)' and to end the aviation sector's tax advantages for domestic and intra-European flights in the view of its fast growing GHG emissions. Under the EU Treaties, the European Commission can take legal action aimed at harmonisation of turnover taxes, excise duties and other forms of indirect taxation. The Commission therefore considers the new European Citizens' Initiative legally admissible and decided

to register it. The registration of this initiative on 10 May 2019 started a one-year process of collection of signatures of support by its organisers. If this registered initiative receives 1 million statements of support within 1 year from at least 7 different Member States, the Commission will analyse it and react within 3 months.

According to an article of Josh Spero and Rochelle Toplensky published on 13 May 2019, there seems also to exist an unpublished report by the European Commission, which concludes that taxing aviation fuel would cut the sector's CO<sub>2</sub> emissions by 11% and have only a "negligible" impact on employment and gross domestic product in the EU. The Commission report states that a tax to jet fuel of EUR 330 per thousand litres kerosene for certain types of flights would increase ticket prices across the EU by 10% and would reduce the yearly number of travellers by 11% to 613 million in the EU.

## 5. Conclusion

In the past, several attempts failed to introduce a fuel tax in the aviation sector, while the tax exemptions, which function as indirect subsidies to manufacturers, airlines and airports, have supported the continuous increase of air transport volumes and CO<sub>2</sub> emissions in the aviation sector. The exemption from levying taxes for fuels in aviation also distorts competition, as there is no level playing field with other, more environmentally friendly transport modes such as railways. Therefore, the EU is currently discussing the various options and measures, including taxes, to achieve a further reduction of CO<sub>2</sub> emissions in aviation and a level-playing field with the other modes of transport. Since rail service is already taxed, the levying of a kerosene tax for aviation would finally create a fair level-playing field between these transport modes. A tax on kerosene would also help to internalise a part of the social costs as well as providing strong incentives to the aviation industry for to develop more efficient technologies. The tax revenues could be used to benefit citizens and for the further development

climate friendly transport technologies.

Therefore, EU Member States and the European Commission will consider the implementing an aviation fuel tax or an EU-wide flight ticket tax, towards promoting fair competition between transport modes and supporting sustainable transport. The meeting of the EU finance ministers in The Hague on 20–21 June 2019 could set the starting point for an unprecedented discussion on aviation taxation. It also seems possible to include the question of introducing a tax for aviation into the working programme for the next five-year term of the European Commission, which will start after the European Parliament's elections at the end of May 2019.

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