PRESS RELEASE

2025 Climate Conference in Belém: Climate impact of global aviation back to pre-coronavirus levels

- **Rapidly growing passenger numbers and slow efficiency gains are preventing the industry from meeting its climate targets**
- **Tax on luxury flights called for in Belém could pave the way for lower-carbon flying**
- **German airlines only in the lower mid-range in terms of carbon efficiency**
- **Airlines investing too little in highly efficient aircraft**

Berlin, 20 November 2025: Global passenger air traffic remains significantly below the levels required to meet the Paris climate targets. Despite improved capacity utilization, internationally agreed efficiency goals are not being achieved, and CO2 emissions have nearly returned to pre-COVID levels. This is according to the latest atmosfair Airline Index (AAI), which was presented today at the climate conference in Belém.

In 2024, airlines were able to improve their CO2 efficiency by around 7.5% compared to the pre-pandemic year 2019. However, this corresponds to an average annual increase of only 1.5%, which is significantly below the 2% annual CO2 efficiency increase agreed upon by the International Civil Aviation Organisation (ICAO). On the other hand, neither the ICAO nor reality suggest that CO2 emissions are likely to fall.

'Even after decades of assurances from the industry, there is still no sign of a turnaround in climate protection in aviation. It is therefore right that a tax on business and first class flights is now being discussed in Belém on the initiative of countries such as France, Kenya and Spain,' says atmosfair Managing Director Dr Dietrich Brockhagen. 'Politicians must step in where the aviation industry fails to deliver.'

Modernisation of aircraft fleets continues to stall

Fleet modernisation and aircraft type optimisation continue to make little progress. The AAI shows that new aircraft such as the Boeing 737 MAX-8, the Boeing 787 or the Airbus A350 can achieve values of less than 3.5 litres of kerosene per passenger per 100 kilometres, even on fuel-intensive long-haul routes. These new aircrafts currently set the benchmark for achievable CO2 efficiency.

Since no airline currently has a fleet dominated by such new aircrafts and maximum capacity utilisation is not being achieved, no airline has achieved the top AAI efficiency classes A or B. Among the larger airlines worldwide, only Sky Airline from Chile has achieved efficiency class C.

Premium classes responsible for a large proportion of emissions, luxury tax proposed

In addition to the type of aircraft, other contributing factors that influence climate efficiency include seating and load factors. When it comes to seating, the proportion of

business and first class passengers has a particularly significant impact. Per capita CO2 emissions in these classes are two to five times higher than in economy class. The premium segment accounts for over 20 per cent of global CO2 emissions from passenger air traffic.

‘Business and first class passengers are disproportionately responsible for the climate impact of air travel. A levy on these flight classes would be socially acceptable, affordable for passengers and in line with the polluter pays principle. Those who cause so much CO2 should also be the first to pay for the others, especially the vast majority of people in the global South who do not fly at all,’ said Brockhagen. The revenue could be used for urgently needed climate protection worldwide, including the necessary technical developments in air traffic.

German airlines in the lower midfield

Overall, German airlines and their subsidiaries are in the midfield. Among the German companies, TUIfly performs best with 76 out of a possible 100 CO2 efficiency points. Lufthansa achieves 60 efficiency points. The subsidiaries of the Lufthansa Group (Brussels, Discover, Austrian, Edelweiss) score between 60 and 70 efficiency points, while Swiss scores only 54 points, mainly due to the high proportion of business class (19% compared to 9% worldwide) and first class (3% compared to 0.5% worldwide).

Among the larger network carriers in European air traffic (more than 100 connections in, from or to Europe), Air Corsica (France), SmartWings (Czechia) and Air Europa and Iberia (both Spain) perform best, scoring 75 to 80 efficiency points. Aegean Airlines (Greece), KLM (Netherlands) and Air Baltic (Latvia) achieve 70 to 75 efficiency points.

In the North American market, Air Canada (72 points), Alaska Airlines (70 points) and United (66 points) perform best among the major network carriers. American Airlines scores 64 points and Delta just under 60 points.

Low-cost airlines are rated in a separate class in the AAI. On the one hand, these airlines often perform better than traditional airlines in terms of load factor and seating, but at the same time they often benefit from subsidies and then convert these into artificially low ticket prices in terms of flight kilometres and thus CO2 emissions that would not otherwise have been generated. Among the low-cost airlines, Wizz (UK/Malta), SpiceJet (India) and Scoot (Singapore) achieve the best ratings. Overall, Asian low-cost airlines perform better than their European counterparts.

Structure, data and methodology

The atmosfair Airline Index (AAI) compares kerosene consumption and, derived from this, the greenhouse gas emissions of the 200 largest airlines worldwide to evaluate their efficiency. In total, the AAI covers around 92% of global air traffic. The current

calculations are based on the latest available data from the global aviation industry for 2024.

In the AAI, each airline can receive between 0 and 100 CO2 efficiency points, separated into short, medium and long-haul flights. This enables passengers to compare the airlines flying to their destination and select the one with the lowest CO2 emissions. This is particularly interesting for companies with a lot of business travel, which can save CO2 and ticket costs by switching airlines.

The index measures an airline's CO2 emissions per kilometre per passenger across all routes flown. The index calculates CO2 emissions for each flight based on factors such as the aircraft type, engine, use of winglets (aerodynamic wing tips), seating and cargo capacity, as well as their utilisation on each individual flights. The data sources used are exclusively international organisations such as ICAO or IATA along with a number of specialised data services in the aviation industry, complemented by computer models developed by aircraft engineers.

The differences between airlines can be significant. Fuel consumption per passenger and kilometre can be more than twice as high for one airline as for another on the same route. The best values are achieved by airlines that operate modern aircrafts adapted to the length of the route, with high seat capacity and optimise use of both seats and cargo space.

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