



T&E analysis of EU taxonomy criteria for aviation

Estimating the taxonomy compliance of Airbus and some of Europe's biggest airlines

February 2023

Context

The European Commission is currently discussing criteria for aviation to be included in EU taxonomy rules, a classification system establishing which investments can be environmentally sustainable. Under the [draft criteria](#) recommended in 2022 by the Platform on Sustainable Finance, traditional aircraft could qualify as “best in class” technology if they are slightly more efficient and thus comply with the taxonomy. This briefing takes a look at the implications of this criteria for Airbus and Europe's biggest airlines.

1. Almost all of Airbus's current order book would be greenwashed by the taxonomy

Using Airbus's public order books and an estimated compliance list provided by the European Union Aviation Safety Agency (EASA)¹, T&E has calculated that **90.4% to 99.7% of Airbus pending aircraft orders as of 31st January 2023 would be considered "best-in-class" (BIC) under current taxonomy criteria²**, assuming they will be delivered before 2032 (**Figure 1**). At 2019 rates (863 deliveries/year), Airbus could deliver its 7,255 orders in 8 years and a half.

These aircraft meet the taxonomy's efficiency standards, but only those aircraft that are replacing older generations of planes would qualify as taxonomy compliant. The rules do not require Airbus to provide proof that an aircraft sold is replacing an older one, the number of aircraft considered taxonomy compliant would be based on a global ratio that has not been calculated yet. This still leaves the door open to make a significant proportion of Airbus' upcoming order books taxonomy compliant.

¹ This briefing and analysis does not reflect the views of the EASA.

² The list provided by the EASA is provisional and not fully complete. The EASA provided data for 90.7% of the models ordered from Airbus, which explains the range in results. The low range is if aircraft not covered by EASA's list are not BIC, the high range is if aircraft not covered by EASA's list are BIC.

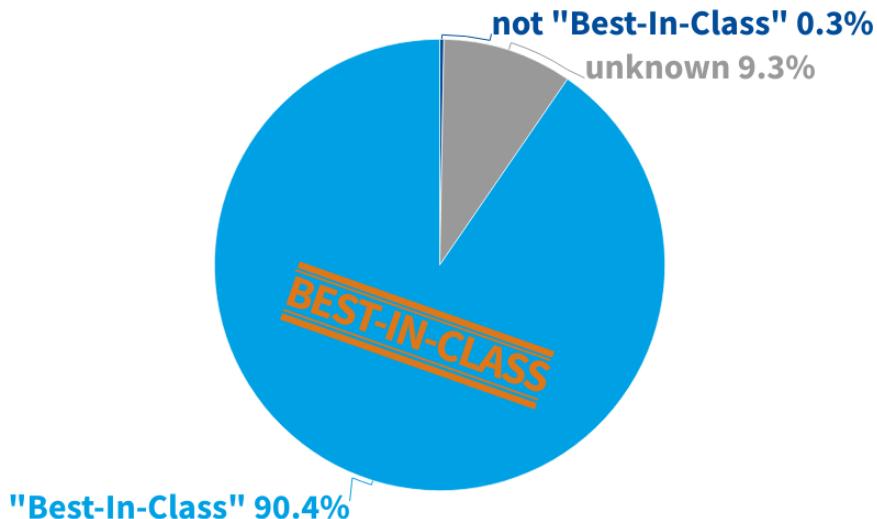


Figure 1: Share of Airbus' order book qualifying as “best-in-class”³

(Source: Airbus' order books and EASA data)

2. A significant share of Europe's biggest airlines' future fleet would be considered some shade of green

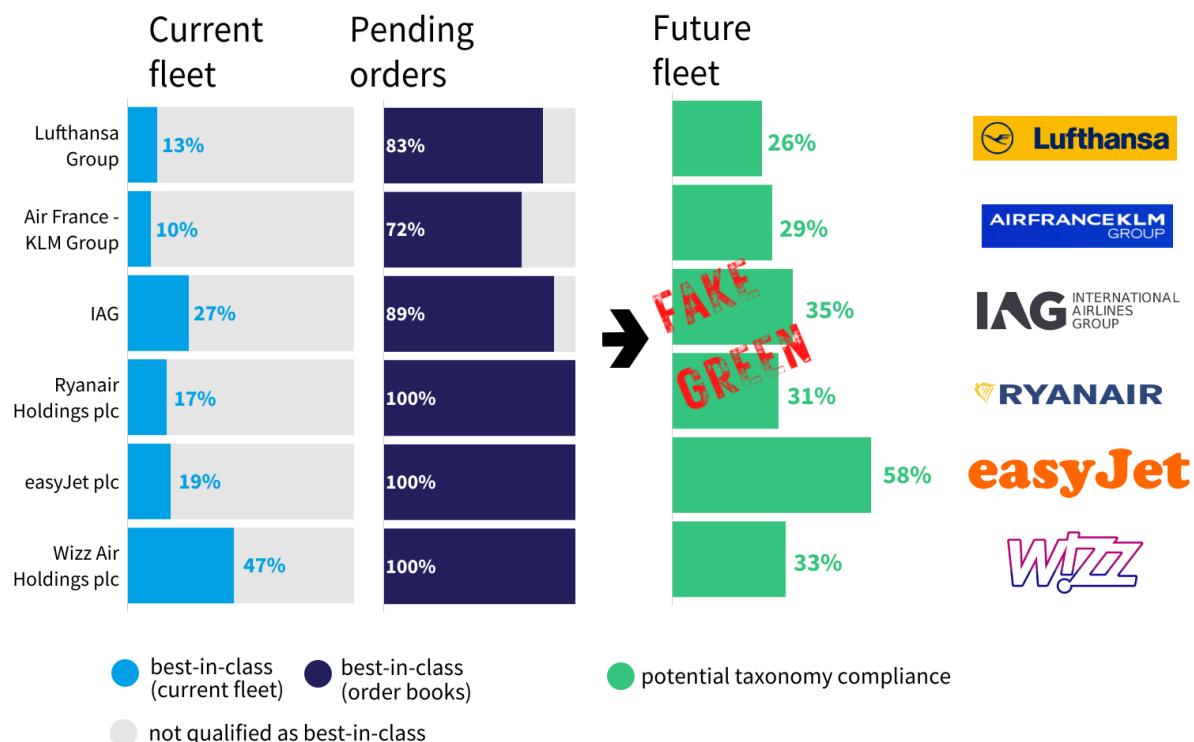
The majority of Europe's biggest airlines' current fleet doesn't qualify as "best in class" (BIC) following EASA's estimated efficiency compliance list (with important fluctuations between airlines). However, **almost all current order books of these airlines are considered BIC (Figure 2)**.

The order books of Ryanair, easyJet and Wizz Air could even be 100% green, as they only buy new generation aircraft in the years to come. As a result, once all pending orders have been delivered, **a significant share of the future fleet of all these airlines could qualify as taxonomy compliant, despite exclusively relying on fossil fuel to operate in the next decade.** For example, up to 58% of easyJet's future fleet could be considered taxonomy compliant. Our analysis assumes that aircraft delivered in the future replace "old" (non-BIC) aircraft that are decommissioned. We do not take into account the % of SAF usage that would be needed per airline in 2030 according to the criteria to continue to be taxonomy compliant, as no reliable data is available yet. The percentage of taxonomy compliance assumed below could therefore fluctuate depending on the airline's fleet replacement strategy and SAF usage. For more detail on this calculation, refer to Annex I, Table 1.

³ For some aircraft models, data are not available in the list provided by EASA. They are labeled as unknown in this graph. If those aircraft models were to be considered as best-in-class, the share of best-in-class aircrafts in Airbus's order book would reach 99,7%. It is assumed that all the models will be delivered before 2032, which is in line with 2019 delivery rate.



Airlines' future fleet compliance with taxonomy criteria



Source: Airbus and Boeing public order books, EASA data. Data on current fleet from Planespotters.

Note: "Future fleet" refers to a situation where all pending orders get delivered and replace the current (2023) fleet. Newly delivered best-in-class aircraft are eligible to taxonomy only if they replace non best-in-class aircraft.

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Figure 2: Share of Europe's top 6 airlines' current fleet and order books qualifying as “best-in-class” and potential taxonomy compliance⁴ (Source: Airbus and Boeing public order books, EASA data. Data on current fleet from Planespotters)

⁴ It is assumed that all the models will be delivered before 2032, which is in line with 2019 delivery rate. Calculations are based on disclosed orders only and disregard aircrafts leasing.

3. Annex

Airlines group	Current fleet ⁵			Pending orders to Airbus and Boeing ⁶			Future fleet
	Number of best-in-class aircraft	Number of non best-in-class aircrafts	Share of best-in-class aircrafts	Number of best-in-class aircraft	Number of non best-in-class aircrafts	Share of best-in-class aircrafts	Potential taxonomy compliance of the future fleet (1)
Lufthansa Group	87	601	13%	144	29	83%	26%
Air France - KLM	51	459	10%	125	48	72%	29%
IAG	173	459	27%	149	18	89%	35%
Ryanair Holdings Group	89	440	17%	127	0	100%	31%
EasyJet Group	62	265	19%	165	0	100%	58%
Wizz Air Holdings PLC	83	92	47%	295	0	100%	33%

Table 1: Taxonomy compliance of airline group's current fleet, pending orders and future fleet

- (1) Using taxonomy criteria definition and assuming that ordered aircraft will replace non best-in-class aircrafts that are decommissioned, taxonomy compliance of the future fleet can be calculated as:

$$\frac{(\text{Number of BIC aircraft in the 2023 fleet}) * \text{RR} + \text{Number of pending BIC aircraft orders}}{\text{Number of aircraft in the future fleet}}$$

where RR is the “replacement ratio” mentioned in the taxonomy criteria, which has not been defined yet. We assumed this ratio to be 40% based on data shared by members in the Platform for Sustainable Finance using Cirium database. Our assumption that pending orders will replace non-BIC aircraft in the current fleet implies that airlines' fleets do not grow, except for Wizz Air

⁵ Based on PlaneSpotter's figures on 09/01/2023: <https://www.planespotters.net/airline/Lufthansa-Group>

⁶ Based on Boeing and Airbus' public order books. Aircraft from these two manufacturers make the bulk of these airlines' fleets and we have thus neglected orders to other manufacturers.

Holdings which have ordered more aircraft than the number of non-BIC aircraft in their current fleet. We assume that once they have replaced all non-BIC aircraft by new ones, they will grow their fleet and therefore reduce their share of taxonomy compliance.

Further information

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A briefing by