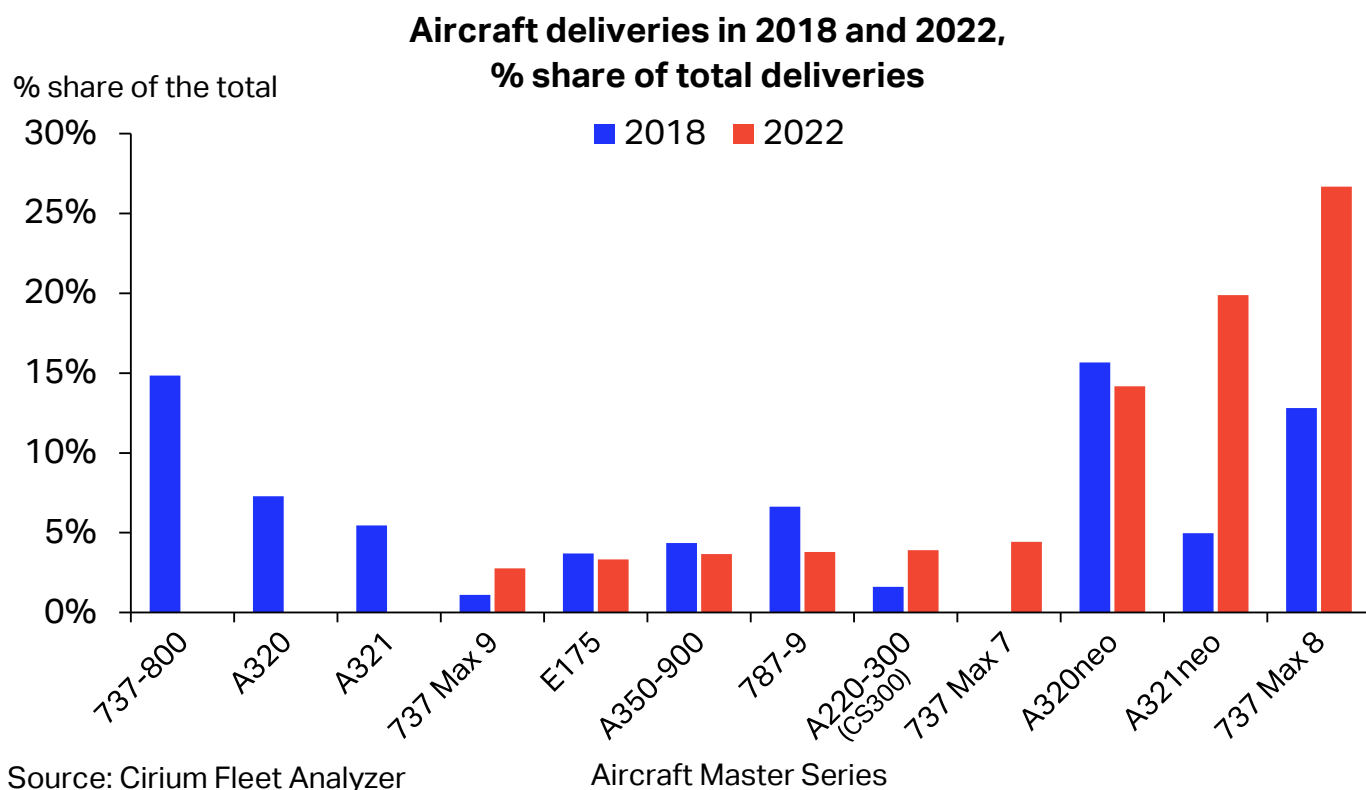




IATA Economics' Chart of the Week

25 February 2022

Re-fleeting helps reduce CO2 emissions



- The COVID-19 pandemic forced airlines to ground large portions of their fleets, retire older and less efficient aircraft types, and pause or cancel deliveries. Indeed, deliveries fell from around 1400 in 2019 to some 800 in 2020. With the ongoing recovery in air travel, aircraft deliveries are set to rise again in 2022 to approximately 1550 according to the data available on 25 February (red bars in chart above). Airlines' choice of aircraft to be delivered will help in the sector's efforts to reduce CO2 emissions.
- We have selected the nine most popular aircraft, representing 83% of total expected deliveries in 2022 as per the latest data, and 78% of total deliveries in 2018 (blue bars in chart above). While not in absolute order, the fuel efficiency of the aircraft shown in the chart above increases from left to right. We can therefore see how this aspect of the emissions-reductions agenda is intensifying, for example with a doubling of the share of the Max 8 in global deliveries.
- Each new generation of aircraft burns 15-20% less fuel per passenger kilometer than the aircraft it replaces, thanks to more fuel-efficient engines, improved aerodynamics, and the use of more lightweight materials, for example. Historically, the global fleet is 80% more fuel efficient today compared to 50 years ago, and [aircraft fuel burn per passenger](#) fell by around 55% between 1990 and 2019.
- IATA is committed to achieving net-zero CO2 emissions in 2050. As much as 65% of the sector's decarbonisation effort will be realised by the increased use of Sustainable Aviation Fuel (SAF), not currently produced at scale and thus now representing only around 1% of total jet fuel use. In the interim, re-fleeting is playing its part in the climate transition.

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