

GMF 2023-2042 Key (Take away) Messages

- The GMF23 explores thousands of combinations and sensitivities around energy prices, SAF penetration, GDP, fuel efficiency improvements etc...
- GMF23 connects the drivers for air transport demand (GDP, demographics...) with existing and future measures related to decarbonation of the sector such as SAF usage and CO2 prices.
- GMF23 forecasts that traffic will grow at a median annual amount of 3.6% (2023-2042 CAGR - Compound Annual Growth Rate) over the next 20 years.

Main highlights:

- People want to fly - and want to fly sustainably. More and more people are flying for the first time than ever before, while emissions per revenue passenger kilometre have halved through technology and operational improvements over the last 30 years.
- Aviation connects communities. It supports 87 million direct and indirect jobs and contributes 4.1% of global GDP.
- Growth is primarily driven by GDP increase (+2.5% 2019-2042), middle class expansion and first time fliers, growing trade (+2.9% 2019-2042).
- Asia, notably China and India will power growth, further shifting aviation's 'centre of gravity' toward Asia.

- GMF23 forecasts a demand for 40,850 new passenger and freighter aircraft over the next 20 years (v 39,490 GMF22)
- This is 1,360 more (Vs GMF22) reflecting one extra year of growth - the forecast's shift to the right.
- Around 17,170 previous generation less fuel efficient aircraft will be replaced by newer fuel efficient aircraft (v 15,440 GMF22). The proportion of demand to replace previous generation aircraft is likely to increase further going ahead to achieve the sustainability ambitions and commitments by the sector.
- GMF23 forecasts demand for around 2,510 Freighter deliveries with around 920 of these new-built.

- The projected 2042 world Fleet-In-Service is smaller than the 2038 Fleet-In-Service projected in the GMF2019, yet we see now more deliveries. This indicates our expectation that the pace of fleet renewal towards the most fuel-efficient aircraft will likely accelerate.
- The sector has already achieved huge efficiency gains (53% CO2 reduction per RPK - Revenue Passenger Kilometre - since 1990)
- Only 25% of the current in service fleet is the latest generation fuel efficient aircraft. The short term priority for decarbonising the sector is to replace the remaining 75% previous generation fleets.
- All currently produced Airbus aircraft are 50% SAF capable. This will increase to 100% in 2030.
- Airbus commercial aircraft products deliver at least 20% lower emissions than today's fleet: (-20 % A320neo; -25% A330, -25% A350; -30% A321XLR; -20-40 % A350F).
- Airbus believes decarbonisation requires a multitude of solutions including: renewing fleets with latest generation aircraft, improving operations and infrastructure, the use of SAF, disruptive technologies (Hydrogen as a fuel, for electric cells and to produce SAF) and market based measures.