

THE NEXT TEN



Envisioning the Next
Decade of Aviation

2025-2034

GENESIS

Pat Madigan and Leanne Brolly

THE NEXT TEN

Foreword



Genesis celebrates its tenth anniversary, serving our airline customers and investors around the world. We are immensely proud of our first decade as a differentiated, full lifecycle aircraft leasing and trading company. Our heading is set, firmly forward, visualising the evolution of the aviation landscape over the coming decade, which is the premise of this industry insight.

The Next Ten has been built upon an interactive dialogue with Genesis' key stakeholders: our team, customers, investors, lenders and suppliers, as well as industry thought leaders and academics. Through this extensive process, the industry has shared its vision for the next ten years. We are very grateful to each of these professionals for generously sharing their time, insights and experience.

Aviation's growth story will continue, as millions of new travellers in emerging markets take to the sky for the first time. New exciting city pairings are benefitting from efficiencies borne of operator ingenuity and innovations in aircraft design. At the same time, the world is entering unprecedented times, with a paradigm shift in global trade, new aircraft delivery levels lagging, and sustainability targets to be achieved. The destination is always clear, although the course and heading may change, so attracting the best and brightest people into our industry will continue to ensure we retain navigational agility and leadership into the future.

I'm also proud that Genesis is nestled within the Irish aircraft leasing eco-system. Over the last fifty years, as the base for an indigenous yet global industry, Ireland has been highly beneficial to our customers and investors. We believe Ireland will remain the premier location to start-up and run aircraft leasing, financing and services companies in the future.

As owners of over half of the world's fleet, the aircraft leasing industry will continue to be aviation's primary engine in the decades to come, enabling airlines to deliver on their ambition to provide society and commerce with efficient global connectivity, while making the world a smaller place.

The seat belt signs are on and the team is buckled in as we look forward to the next ten years of opportunities, innovation and success.

Karl Griffin

Chief Executive Officer

May 2025

CONTENTS

KEY TAKEAWAYS

The Next Ten landscape 2

The constants to 2034 6

one RESILIENCE 8

Aviation will continue to shape the world over the next decade

two PEOPLE 12

Millions of employees will be needed to enable industry growth amid rising costs and talent shortages

three DEMAND 16

Rising travel demand will see the global fleet grow by 41% by 2034

four SUPPLY 22

Supply side challenges will persist until the end of the decade

five TRANSITION 26

Current generation aircraft will fly on for longer to fill the capacity gap

six AIRLINES 32

Airlines have recovered from the pandemic and are looking forward to a period of profitable growth

seven LESSORS 40

Leasing will continue to be a core enabler of global mobility

eight SUSTAINABILITY 46

Net zero by 2050 remains our industry's ambition

nine INFRASTRUCTURE 50

Aviation value chain will need to scale capacity and infrastructure to enable growth

ten INNOVATION 54

Aviation will be reshaped by technology in the next decade, yet no new aircraft programs are on the horizon

Futurescope 62

The Next Ten landscape

The following perspectives summarise the conclusions of *The Next Ten*, informed by Genesis' industry-wide engagement.

Aviation will continue to shape our world

Backed by the International Air Transport Association's (IATA) December 2024 forecast of a 3.8% annual growth in global passenger demand over the next twenty years and innovations in sustainability and technology, we believe that aviation is poised to thrive over the next decade, connecting the world with renewed efficiency and purpose.

When faced with existential challenges, aviation has proven time and again to be fiercely resilient. Aviation was tested like never before by the depth and duration of the pandemic crisis. Traffic in 2020 plummeted 66% to 1999 levels, and airline two-year economic losses reached \$280 billion. From trough-to-peak, the market recovery took almost four years.

Airlines have rapidly returned to record profit and growth. More passengers flew in 2024 than ever before in history. In 2025, IATA expects airline revenues to top \$1 trillion on five billion passenger trips, both new, all-time industry records.

Fundamentally, passenger air traffic demand has been a function of global economic activity, influenced by demographics, in particular a growing middle-class population with additional discretionary spend. With gross domestic product (GDP) growth projected at 3.3% globally to 2029, this points to a continued healthy outlook for air traffic.

However, such forecasts may need to be somewhat tempered by the regime of tariffs and trade restrictions that has begun to impact our globalised system of economic integration. Analysts and lawyers across the aerospace industry are busy deciphering the few known details of the sweeping tariffs announced by the US administration in April 2025, as well as the potential reciprocal responses.

An increased level of protectionism adds risk of rising inflation and slower economic growth. That said, in 2023 world trade was worth \$22.6 trillion, with the US importing \$3 trillion of goods and services for a 13% share. If US-led tariffs on imports are here to stay, then it seems likely that the remaining 87% of world trade will occur in an increasingly benign tariff environment, positively benefitting flows of goods and services.

We remain confident that aviation has demonstrated an enduring ability to respond and adapt to all forms of market dislocation. This will see the industry continue to be an attractive and profitable asset category for investors in the decade to come.

Rising demand will see the global fleet grow 41% by 2034

60% of the world's population is yet to set foot inside an aircraft. Over the decade to come, emerging markets will be the engine of global traffic growth – powered by rising populations, expanding incomes and growing middle classes. The majority of the expansion is expected to occur in Asia Pacific, with Indian air traffic forecast to grow at a compound annual growth of 9.3% over the next decade.

This increased demand will see the global aircraft fleet grow from 28,000 aircraft in 2025 to 39,500 by 2034, a growth rate of 41% across the decade. We expect that just under 13,000 new narrowbody aircraft will be delivered over the next ten years – 42% of the orderbook will be for larger-gauge A321neo and 737 Max 9/10 variants, up from 16% in the current generation.

The increased payload range capability offered by new variants will help re-shape airline networks by enabling the opening of hundreds of new routes. The A321XLR offers up to 1,500nm more range than the A321ceo.



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60% of the world's population is yet to set foot inside an aircraft.

The willingness of passengers to pay higher fares for premium class travel – particularly in developed markets – will continue to drive full-service carrier earnings in the decade to come, powered by popular loyalty programs and credit card partnerships.

If tariffs result in fewer new aircraft deliveries, that will increase positive pressure on secondary market values and lease rates as supply further tightens.

Supply side challenges to persist until end of the decade

Today's era of supply/demand disequilibrium is expected to last until at least the early 2030s, significantly impacting the next ten years. A return to balance may begin to emerge around 2029 and beyond.

Lost production since 2019 now exceeds 5,000 aircraft – equivalent to at least three years of deliveries – driven by the pandemic shutdown, a slow subsequent production ramp-up and difficulties resolving supply chain issues. The industry should have delivered 1,700 aircraft in 2024, 600 more than it actually achieved, a shortfall that has compounded over the last six years.

This imbalance has now existed for six years despite the industry's concerted efforts to restore and subsequently exceed previously seen production levels. At both the original equipment manufacturer (OEM) level and within the broader supply chain, the industry continues to face capacity shortages and bottlenecks in particular in metal forgings, cabin interiors and engines, all the time under pressure of scarce labour and global inflation. The supply chain is also working to understand the rapidly evolving dynamic of tariffs that may be applied on aerospace parts as they cross borders, sometimes multiple times.

In addition, unusable capacity compounds the issue as many new aircraft are grounded by technical issues post-delivery. At the start of 2025, 850 passenger aircraft were parked due to engine issues including 680 A320neo Family aircraft (32% of the delivered fleet), according to Cirium.

Current generation aircraft will fill the capacity gap

The consequence of this undersupply of new aircraft will be that current generation aircraft will have to fly more and for longer. Lessors will experience fewer transitions and ultimately aircraft will retire older than the current norm of 25 years' service.

Nine years after the introduction of new generation (new gen) aircraft in 2016, such as the A320neo and 737 MAX, they comprise 27% of the narrowbody fleet as of early 2025 (Airbus is at 36% and Boeing at 17%). It is now likely to take until 2029 for new gen narrowbodies to reach 50% of the in-service fleet. By 2034, we expect them to account for over 70% of the in-service fleet.

Reliable and predictable current generation workhorses like the 737NG and A320ceo will continue to command elevated lease rates, asset values and part-out prices for at least the next five years, and beyond for 737NG-800 aircraft as 737 MAX deliveries lag. Current generation aircraft will also be popular acquisition targets for airlines wishing to lock-in capacity and flexibility to manage supply chain disruption. This will also create unprecedented demand in the secondary parts trading market.

We do not foresee that any new clean-sheet program will launch before 2034, as OEMs focus their bandwidth on delivering their committed backlogs. The yet to be certified 737-7, 737-10, 777-9, 777-8F, A350F, as well as variants of the C919, will complete this fleet type cycle.

Net zero by 2050 is our industry's ambition

By the early 2030s, we can expect that lower emissions new gen aircraft will be widely adopted and we will see a much-needed increase in the level of sustainable aviation fuel (SAF) availability.

Our industry's decarbonisation ambition is clear, but the reality is that we are still at the early stages of a multi-decade journey to transform aviation into a low carbon emitting sector. This transition could take more than 40 years and cost \$4.7 trillion by 2050, according to IATA.

As of early 2025, aviation accounts for 2.1% of global carbon emissions, which is about the same as the fast-growing data-centre sector that is supporting the AI revolution. In terms of transport CO₂ emissions, aviation is responsible for 13% and road transport 73%, according to the European Environment Agency (EEA). Through technology and efficiency advances, aviation has successfully de-coupled CO₂ emissions growth (2% average from 1990) from air traffic growth (4%).

The deployment of new gen aircraft, the rapid proliferation of SAF and the development of new, lower emissions technology are the most realistic pathways towards large-scale decarbonisation today. All will take tremendous levels of industry and government focus. It will require new SAF refining capacity to be green-lit in the near future, given the long construction timelines.

With no new aircraft design on the horizon in 2025 and OEM orderbooks full, the next decade will be a time to progress the technology building blocks to enable the launch of the next 150-250 seater programs in the mid-2030s – most likely by today's incumbent OEMs but possibly by brave new entrants.

New technology is essential but not on the horizon

There are just twenty five years to go if we are to achieve net zero by 2050. It will be vital to make significant progress over the next ten years on the development of new aircraft technology and the transition to new fuel sources. IATA's Aircraft Technology Net Zero Roadmap outlines electric/hydrogen aircraft being available for regional markets by 2035 and for short-haul markets by 2040.

Yet, these timelines seem highly ambitious in 2025. Heart Aerospace's 30-seat hybrid/electric ES-30 is the only clean-sheet aircraft greenlit for entry into service (EIS) in the next decade; its X1 full-scale demonstrator is due to fly later in 2025.

For Airbus, Boeing and Embraer, the next decade will instead be a time to progress the technology building blocks to enable the launch of the next narrowbody programs in the mid-2030s – researching new wing designs, advanced materials, new powerplant concepts (including open-rotor designs), and fuels (sustainable aviation fuel /electric/hydrogen/hybridisation).

Airbus has shared initial thinking on its next generation single aisle (NGSA) but pushed back the timeline of its ZEROe electric hydrogen-powered aircraft by 5-10 years, Boeing has shelved plans to flight test its X-66 Transonic Truss-Braced Wing demonstrator and will focus instead on further 'thin-wing' research, while Embraer is progressing its Energia sustainable technology development.



2.1%

Aviation accounts for 2.1% of global carbon emissions

13%

Aviation is responsible for 13% of transport CO₂ emissions in comparison to road transport at 73%



Potential new entrants, JetZero and Natilus, promise game-changing 50% improvements in fuel efficiency with revolutionary blended wing body (BWB) concepts. Other ambitious start-ups include ZeroAvia, MAEVE and Boom Technology. That said, the financial and engineering challenges involved in nurturing and delivering new aircraft programs for a global customer base should not be underestimated, as underlined by a recent round of failures and delays suffered by urban air mobility (UAM) and electric vertical take-off and landing (eVTOL) providers.

Leasing will continue to be a core enabler of global mobility

As of early 2025, 52% of the world's fleet by aircraft count and \$440 billion of assets were under management by lessors, according to Cirium. We expect the lessor share of the fleet to continue to climb as lessors remain the optimum solution for 'asset-light' airline balance sheets. Lessors are expected to finance over \$500 billion of new aircraft assets in the decade to 2034.

As aircraft assets will fly for longer and maintenance requirements grow exponentially, there is a mounting demand for deep capability across the full lifecycle of an aircraft leasing investment. Managing green time and extracting the maximum value from aging assets requires deep-domain expertise, something not available to all lessors.

The lessor landscape will likely evolve towards:

- A small number of scale lessors with portfolios of over \$25 billion aircraft, benefitting from size and capability advantages.
- Innovative speciality lessors with differentiated offerings that demonstrate clear added value to customers and shareholders.
- In between, middle-of-the-market lessors, with portfolios of up to \$15 billion, some investment grade-rated (IG), some with orderbooks, and which may find themselves being squeezed both from scale lessors above and speciality lessors below, as their offer becomes increasingly commoditised

52%

of the world's fleet is managed by lessors

Source: Cirium Jan 2025
51.7% by aircraft market share
55.9% by indicative market value

\$440 billion

of assets is managed by lessors

Source: Cirium Jan 2025

The constants to 2034

While indispensable, long-term forecasting will always be prone to subsequent environmental and technology developments. The world a decade from now will evolve in ways which cannot be foretold from this vantage point – when Genesis was founded in 2014, who could have predicted the impact a coronavirus pandemic would have just six years later?

So, if we were to reverse the question: are there constant aviation themes which we can rely upon a decade from now?

Are there pillars of understanding of aviation demand today that we believe will still be standing tall in 2034?

Yes, we believe there are:



IMPORTANCE OF AIR TRAVEL

The enduring importance of air travel to the world's commerce and connectivity, which will continue to shape our world and cannot be replaced by other means of travel or communication – there is simply no alternative to flying now or foreseen for journeys beyond 1,500km.



POSITIVE GROWTH

The long-term positive growth trajectory of aviation demand, underpinned by the continued expansion of the world economy, driven by population expansion and rising incomes with the highest growth rates expected in emerging markets.



THE APPEAL OF LOW FARES

The enduring appeal of low fares to travellers, which will continue to stimulate traffic demand and fleet expansion as low-cost carriers (LCCs) grow – a movement well supported by lessors, with 68% of the LCC fleet leased versus 52% of the fleet average.



THE VALUE OF LEASING

The long-term value proposition offered by leasing to airlines, including more fleet flexibility and reduced capital intensity that facilitates faster growth.



RELIABLE PARTNERS

The reduced counter-party risk that leasing offers OEMs, with lessors reliably turning up to finance new aircraft, when other forms of financing have shown a tendency to come and go with the economic cycle.



CONSISTENT RETURNS

The consistent investment returns offered by lessors to investors and financiers, now demonstrated over five decades and multiple economic cycles.



AIRCRAFT LONGEVITY

The reality that thousands of current generation aircraft will fly for longer and retire many years older as they form the capacity bridge until normal service is resumed and supply/demand equilibrium is restored at the end of this decade.



NEW GENERATION AIRCRAFT

The need to add 15,000 new generation aircraft on order over the next ten years to provide for growth while reducing our industry's emissions, a transition which will be, in large part, funded by aircraft lessors.

>> The following chapters outline ten industry characteristics and their future development.



one RESILIENCE

KEY TAKEAWAYS

Aviation has proven time and again to be ferociously resilient to any existential challenge

Passenger demand (RPKs) is expected to grow by 8.0% in 2025 and 3.8% long-term

Aviation supports 4% of global GDP, 86 million jobs, and generates a \$4.1 trillion economic impact

If aviation were a country, it would rank 20th in size by GDP (similar to Switzerland)

Trade Tariffs - if they become permanent - may lead to adjustments but could also lead to asset price appreciation as in-service aircraft become relatively more attractive

Long-term GDP growth is forecast at ~3.3% by the IMF and EIU; however, the IMF has projected that tariffs could have a 0.5% negative impact on global GDP in 2025

Aviation's resilience is proven through multiple economic cycles

In early 2020, the world experienced a life without aviation because of COVID-19. Closed borders, grounded aircraft and cancelled flights meant families were dispersed across the world and unable to be together. This black swan event resulted in a 93% drop in air traffic and every international route was closed. Tourism and trade ground to a standstill. Amid lockdowns and travel restrictions, airlines suffered business-threatening economic losses of \$280 billion across 2020 and 2021.

Fast forward to early 2025, and the airline industry's rebound has been remarkable. 2019 traffic levels were overtaken in February 2024 and growth has returned to the long-term trend. IATA predicts that 5.2 billion people will fly in 2025 (the first time that number exceeds 5 billion), a 6.7% rise on 2024, with airlines expected to post record profits of \$36.6 billion.

Prior to COVID-19, global aviation experienced just three years of negative growth over the past seven decades, underlining the sector's strength and people's passion for travel.

Fundamentally, passenger air traffic demand has been a function of global economic activity, influenced by demographics, in particular a growing middle-class population with additional discretionary spend.

- Historic global air passenger traffic – measured in Revenue Passenger Kilometres (RPKs) – has roughly doubled every 15 years.
- Between 1970 and 2019, the compound annual growth rate (CAGR) was 6.2% per annum.
- During the super-cycle period of 2010-2019, the CAGR grew even faster at 6.7% culminating in 8.5 trillion RPKs.

As we look forward, the outlook for the future of aviation remains bright. Air traffic growth has historically demonstrated a strong correlation with GDP growth. Between 2000 and 2019, world GDP grew at a rate of 3.4% and RPKs at 5.4%, giving an RPK multiplier factor of 1.6x.

According to the Economist Intelligence Unit (EIU), real GDP growth (PPP) is projected at 3.3% globally to 2029, which points to continued healthy demand for air traffic. Developed economies have a GDP forecast of 1.8%, while developing and emerging economies 4.1%. On a world basis, using an RPK multiplier factor of 1.6x, a 3.3% GDP rate would translate into an RPK CAGR of 5.3%.

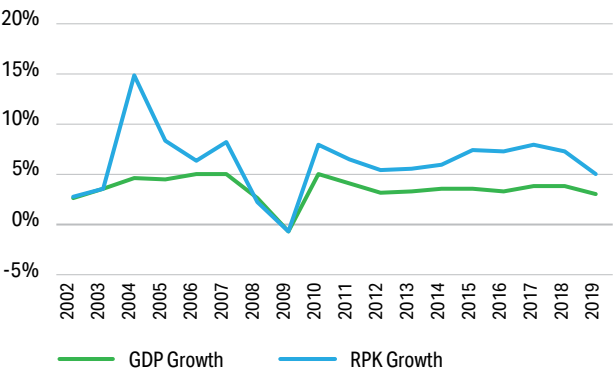
However, the EIU's forecast was produced in January 2025, before US tariffs were announced on 2 April and before other countries responded. These developments risk denting global GDP growth in the short-term.

On 22 April 2025, the International Monetary Fund (IMF) issued an update to its outlook for 2025 global GDP. It projects global GDP growth of 2.8% for 2025, while down from the 3.3% it forecast in January it remains robust. It cautioned that escalating trade tensions could further dampen growth.

"We are entering a new era as the global economic system that has operated for the last 80 years is being reset" according to IMF chief economist Pierre-Olivier Gourinchas.

While most indicators towards growth are green and positive, it is prudent to be aware of potential risks that could temper growth as this decade crystallises. These risks include the potential of tariffs being permanently introduced between major trading nations as the world moves towards an era of protectionism; the ensuing effect on consumer confidence and buying power; the ongoing impact of supply chain delays; elevated and enduring labour costs; and the cost of delivering on sustainability commitments (through SAF costs or environmental taxes).

Air traffic correlation with GDP



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It is a remarkable time. In almost every region of the world, there has never been a time of more opportunities.

Yet, in the same moment, we can also see that there has never been a time of more identifiable risks.

Darren Hulst
VP Commercial Marketing, Boeing

Real GDP growth (with PPP exchange rates)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
World	-2.8%	6.5%	3.6%	3.3%	3.2%	3.3%	3.3%	3.3%	3.3%	3.3%
Developed economies	-3.9%	5.9%	2.9%	1.7%	1.7%	1.8%	1.7%	1.8%	1.8%	1.8%
Developing and emerging economies	-2.0%	6.9%	4.0%	4.3%	4.1%	4.1%	4.2%	4.2%	4.1%	4.1%

Source: Economist Intelligence Unit, January 2025

A potential new paradigm for global trade

At this early stage, we can only speculate about the potential scale and impact of tariffs that continue to evolve. In the near term, if these tariffs were to become permanent, they would likely lead to cost inflation and an increase in the relative value of the current aircraft fleet. In the longer term, important questions would need to be answered about how our system of global economic integration will need to evolve, and whether the world is set to move away from an era of globalisation.

Some early thoughts as to the potential impact on aviation:

- The aviation industry (aerospace, airlines, lessors, maintenance, repair and overhaul (MRO)) needs to understand more about how the global tariff scheme might work in practice. For example, will the entire value of aircraft, engines and components be taxed or just the foreign content; how will aircraft leased by non-US lessors be treated; will other jurisdictions, notably the EU, announce reciprocal tariffs?
- New aircraft deliveries risk being impacted by supply chain bottlenecks, higher costs and uncertainty regarding tariff specifics. Tariffs could impact aircraft production materials such as aluminium or they may extend to completed aircraft, it is not yet clear. They may even extend beyond completed aircraft and encompass a complex global supply chain for aircraft parts and maintenance.
- Boeing is at greater risk from tariffs on exporting aircraft than Airbus. Airbus is likely to only face tariffs on sales of aircraft into the US market, whereas Boeing risks being exposed to retaliatory tariffs on sales to countries all around the world (China has already refused to accept delivery of 737 MAX aircraft with 145% tariffs applied).
- Demand for travel to/from the US risks being impacted in the short-term. This trend would negatively impact airlines and airports which rely on transatlantic demand.
- Demand for air cargo risks being checked. When the US last introduced a tariff regime in 2018, air cargo demand growth slowed from 9% in 2017 to 3.5% in 2018, before declining to -3.3% in 2019. This time, with significantly higher tariffs proposed and other countries reciprocating, the impact on the demand for air cargo could be higher.
- Whether tariffs will also be applied to repairs and overhauls that are performed in tariff-affected countries is still unclear. Historically, when US commercial operators temporarily flew aircraft to foreign jurisdictions for repairs, no new formal entry or duties were required upon return (based on the 1979 Agreement on Trade in Civil Aircraft Agreement, to which the US was a signatory).
- Broader economic implications could affect the entire aviation ecosystem as tariffs dampen economic growth and increase costs. Higher-cost aircraft, parts and maintenance would inevitably lead to increased airline operational expenses and have to be passed onto passengers through higher fares, dampening demand. Civil aviation contributed \$1.5 trillion to US GDP in 2023, representing ~5% of GDP and supporting close to 10 million jobs. Boeing employs 170,000 across the US.
- If new aircraft prices were to increase to accommodate tariff charges, the relative attractiveness and value of the existing fleet could be seen to improve. Demand for used serviceable material could increase particularly if already in-country and not subject to additional import tariffs. Some airlines may need to turn to their lessor partners to deal with near-term challenges, increasing lessor ownership of the global fleet.

Aviation has been a key enabler of the globalisation paradigm that has benefitted the world for the last fifty years. The long-term impact of tariffs will depend on how tariffs will affect airline profitability, lease structures, the global balance of supply and demand for air travel. At the same time, tariff related disruptions may create pockets of opportunity for lessors and investors able to capitalise on the shifting trade flows.

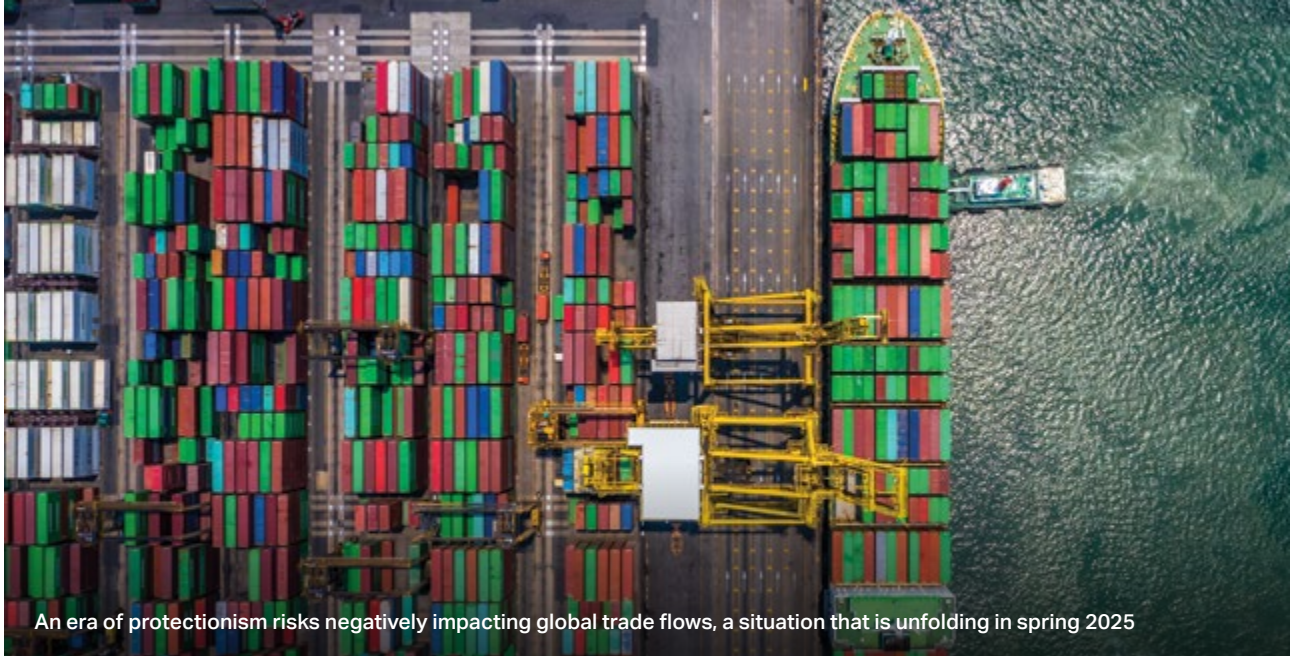


As a primarily non-recourse lender, we are asset people. Lessors are better set up than lenders to redeploy assets.

Lessors now manage over 50% of the global commercial aircraft fleet. We probably see that level continuing to rise.

Airlines have clearly seen the value of leasing and the flexibility it provides coming out of the pandemic, when they executed SLBs to quickly raise capital.

Michelangelo A. Raimondi
Managing Director, Morgan Stanley



An era of protectionism risks negatively impacting global trade flows, a situation that is unfolding in spring 2025

Aviation as a force for good

For over 120 years, since the Wright Brothers first took to the air in Kitty Hawk, North Carolina, in 1903, aviation has transformed our world. It connects and unites people, bringing cultures, business and communities together.

Aviation has a \$4.1 trillion annual economic impact, supporting 3.9% of global GDP and 86 million jobs worldwide. Air travel provides unmatched global mobility, serving 67,300 routes today. Each year, air freight carries cargo worth \$8 trillion – equivalent to 33% of world trade by value.

Aviation will continue to be an integral part of any future transport ecosystem. In many cases, it is the only practical connection in a national and international context – there is simply no alternative today or foreseen to flying for travel distances over 1,500km.

\$4.1 trillion

Aviation has a \$4.1 trillion annual economic impact, supporting 3.9% of global GDP and 86 million jobs worldwide

\$8 trillion

\$8 trillion in cargo is carried each year, equivalent to 33% of world trade (by value)

Aircraft leasing will continue to be the lifeblood of aviation

Since it was first introduced over 50 years ago, aircraft leasing has revolutionised how aircraft are financed and how airlines manage their fleets.

Today, 52% of the world's fleet is leased, and the sector has helped facilitate expansion of the global fleet (by 6x over 50 years), making it affordable and available to more people. Lessors are now guardians to \$440 billion of assets or 14,000 aircraft, flown by the world's airlines. By 2034, we can expect the global leased fleet to have grown to reach a landmark 20,000 aircraft.

Those airlines utilising the leasing channel will continue to gain access to the aircraft they need without significant upfront capital. They gain the flexibility to scale their fleet size to meet demand fluctuations. Their operating costs become predictable with lessors absorbing the risks of asset depreciation and residual value. Airline balance sheets become liberated to focus on business growth, obtaining credit or attracting investors.

The recent pandemic years clearly underlined the fundamental symbiosis between lessors and airlines; lessors not only helped airlines survive the immediate crisis but positioned them for recovery as demand returned. For the industry's essential lenders, lessors represent ideal counterparties, trusted intermediaries that facilitate investments in long-term aviation growth, while providing services that enhance the attractiveness of those investments. Leasing will continue to enable aviation growth in the decade to come, keeping airfares down, and making the world a smaller place.



two PEOPLE

KEY TAKEAWAYS

Aviation will need to attract millions of new employees if it is to deliver on its growth potential

Labour shortages now cut across the entire industry, from engineers to baggage handlers

More than ever, aviation will face competition for top talent both from within the industry and from other appealing industry sectors like tech and AI

More needs to be done by all industry players to highlight the appeal of an amazing aviation career

Ireland will continue to offer a compelling and attractive ecosystem to aviation employers

Technology will help replace mundane tasks, liberating staff for more value-adding work

The power of people in aviation

Since the Wright Brothers first flight, the success of aviation across the globe has been led by the passionate people that work in this very unique industry. The spirit of those who work in aviation hasn't changed all that much: working together to serve passengers, to run a global transport system, to bring people together, within the safest form of transport on earth.

Throughout its history, aviation has offered an extraordinary platform for talent, an engine of opportunity that has powered not just aircraft, but entire careers. From the assembly lines of aerospace manufacturers to the ramps of global airports, from maintenance hangars to control towers, and from the cockpits of every aircraft to the boardrooms of leasing companies, people have always been the defining asset of the aviation sector.

Over the last fifty years, the industry has grown at an incredible pace—fuelled by innovation, ambition and a global demand for connectivity. That growth has created unparalleled career pathways in airlines, airports, manufacturers, MROs, aviation financing and specialist technology firms.

The future is just as compelling. AI specialists, software engineers, pilot cadets, aeronautical engineers, data scientists, and sustainability leaders are all urgently needed. New aircraft designs, smarter operations, digital transformation, new fuel development and environmental adaptation will be led by people, working in teams that blend engineering rigour, operational excellence and creative thinking.

As new challenges emerge, from decarbonisation to digital disruption, aviation's greatest strength will again be its people. Great companies are built by great teams. No business in aviation can outperform its talent base. If the industry is to rise to meet the demands of the next ten years—safely, sustainably, and profitably—it must continue to inspire, invest in, and elevate those who choose to work within it. Aviation is not just a career, but a calling. And in today's world, that message needs to be made louder than ever.

The competition for talent

Today, aviation employs 12 million people directly and supports 86 million jobs worldwide. However, in 2021, the industry's workforce contracted 43% from 2019 levels and it still in the process of fully recovering from this unprecedented exodus of talent, which has created widespread operational gaps. In 2025, labour shortages still cut across the entire value chain, from pilots to engineers and baggage handlers to air traffic controllers, threatening the industry's ability to meet forecasted long-term travel demand growth.

Competition for top talent is now fiercer than ever. Aviation is not only facing intra-industry rivalry, but it is also up against other high-growth sectors such as tech, media and pharma, which are pulling talent away by offering better perks and more flexibility. Increased defence and military spending (which rose 11.7% in 2024 in Europe) will be a further challenge for the recruiters of commercial aviation.

CAE, the flight training services leader, forecasts a need to recruit 1.3 million new aviation professionals by 2032, including 252,000 pilots, 400,000 technicians and 599,000 cabin crew members. Prompted by record backlogs, the aerospace industry has gone on a hiring spree. In 2023, Airbus expanded its worldwide workforce by 14,000 employees, Safran recruited more than 18,000 and Thales Group took on 10,900 new hires. In fact, Thales has emphasised that its future business success will depend on its ability to hire and develop the best people during a time of 'intense global competition for talent,' particularly in science and engineering skills.

At the same time, labour costs are rising across the aviation value chain as employers seek to attract and retain the talent they need. It is no surprise that employees are seeking higher salaries now, given the cutbacks many were asked to bear during the pandemic years and the level of cost inflation since. Whether at OEMs, airlines or airports, staff have agreed or are negotiating for catch-up labour agreements following years of inflation. Labour costs will jump 7.6% in 2025, according to IATA.

United Airlines' 2023 industry leading pilot agreement lifted salaries by 40%, adding \$10 billion to the cost structure over four years. Lufthansa raised pilot salaries by 18% in 2023, a benchmark that may be used by other employee groups in Europe. Aer Lingus pilots also agreed to an 18% pay increase over four years in July 2024.

The industry will need to come together and find creative ways to ensure a steady pipeline of highly trained personnel for the next 10 years and beyond. It will need to better promote careers in aviation to the next generation, reach out to underrepresented communities, and develop innovative support programs to expand the pool of talent needed for the continued growth and safety of our industry.





Aer Lingus pilots Sonya Bisset and Lisa Cusack

Image courtesy of The Irish Independent

Just 6% of the global professional pilot community are women. Air India and Aer Lingus have the highest shares of female pilots at 12% and 11% respectively - but overall, the industry needs to do better.

Addressing the skills shortage

One of life's greatest fortunes is the ability to monetise a passion. And aviation is that passion for many – it promises that each day will be different to the last, offers the chance to see the world's wonders, and brings us up close to some incredible aerospace technology.

For many people of a certain vintage, aviation was always the dream career path. That said, for many of the younger generation seeking to forge their own career paths, it seems that aviation may hold less appeal, and other industries seem to offer more promise. The real war for talent is not within aviation, but between aviation and other industries.

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CAE, the leading supplier of flight training services, forecasts a need for 1.3 million more aviation professionals over the coming decade, including 252,000 new commercial pilots, 400,000 technicians and 599,000 cabin crew members, driven both by industry growth and by the need to replace employees retiring from the profession.

CAE

Whatever the underlying causes, after three years of COVID, inflation and cutbacks, the aviation industry finds itself with a shortage of skilled labour, low recruitment levels and lost years of training and experience. The retirement of many skilled Baby Boomers during and since the pandemic is also contributing to high-profile quality-control issues that are impacting the aviation sector.

Given the importance of the people challenge to aviation's future, more focus is needed at an industry leadership level to address attracting new talent to the industry, as well as reducing costs through the application of new technology. People challenges and their solutions will vary markedly across the world. Below, we outline some suggestions that could be considered in an Ireland context.

Raise the profile of aviation

If aviation is going to stem the tide and fill the millions of jobs needed over the next decade, it needs to go back to basics. A career in aviation needs to be marketed as a way to 'see the world', to 'democratise the skies' and 'push the design envelope of what is possible.' In Ireland, the message needs to be shared with young jobseekers that to work in aviation is to have the opportunity to be at the epicentre of a global industry ecosystem, with the country being a hub for aircraft leasing, world class airlines, airline leadership, the LCC business model, aviation training, consulting and maintenance.

Target new talent pools

To drive interest in aviation as a career and access exciting new pools of talent, it will be essential to start influencing young people early in their career journeys – whether they are still in school, in early university education, or in post-graduate education. In order to turn heads at a young age, this will require aviation role models to meet with the next generation and tell their own personal stories.

Around the world, there are 58,000 female pilots, who represent just 6% of the overall pilot community. At Aer Lingus, 11% of its 800 pilots are women, the second highest airline level behind Air India's 12%. The challenge of raising its female pilot cadre is highlighted by a 7% application rate to the airline's pilot cadet program. The airline has emphasised raising its diversity level through an education outreach program to primary schools promoting the merits of a pilot career to 7-10 year olds. What is true for pilot recruitment is also the case for other roles; there are vast pools of talent (male, female, in catchments far from airports) that could be inspired to start their aviation journeys if they knew more about the possibilities and had role models to follow.

Support apprenticeships and scholarships

As part of the broader effort to appeal to more potential talent, the aviation industry will need to embrace building skillsets through the use of practical education programs, apprenticeships and scholarships. Putting an aviation apprenticeship onto the radar of school-aged young people, will need to be supported by industry, lobbying groups, education and career counselling and government bodies. In Ireland, the airlines and MROs of Dublin Aerospace, Atlantic Aviation, Aer Lingus, ASL and Ryanair are all leading sources for aviation apprenticeships, while Emerald Airlines offers a graduate training program – and these investments in the next generation should see a strong crop of qualified maintenance and management talent begin their careers and subsequently move throughout the industry over the next decade and beyond.

Build great cultures

Keeping talent engaged and contributing is another key challenge of our time, in aviation and beyond. Just one in four employees say they feel connected to their company culture. Legendary leaders like Martin Luther King Jr., Steve Jobs, Juan Trippe, Herb Kelleher and David Neeleman have been able to inspire, rather than manipulate, in order to motivate people. Those who inspire give people a sense of purpose or belonging that has little to do with any external incentive or benefit to be gained. Those who truly lead are able to create a following of people who act not because they were swayed, but because they were inspired.

Hire great people

Building great teams starts with choosing new joiners very carefully and deliberately, identifying a profile of people that are truly motivated by the challenge of the industry. It is important to find profiles that are curious, motivated and who possess a strong work ethic. There is a real value in communicating with potential candidates on a much deeper level, delving into their core motivation. It will help ensure those that are recruited are genuinely interested and passionate in the field they are looking to work in.

Use transformational technology

Technology will be an essential enabler to help with aviation's war on talent – both as a way to lower employment costs, which as we have seen are rising, and as a way to replace menial, routine tasks, which will then free up people to find roles that can be more meaningful, value-adding and fulfilling. For example, Ryanair has set a target to remove all check-in desks and paper boarding passes by November 2025, replacing them with automated bag drop machines and electronic boarding passes. We can expect this to become normal as the decade progresses.



United was the first airline to support Live Activities for iPhone, including a helpful countdown to departure clock on the Lock Screen

Image courtesy of United Airlines



three DEMAND

KEY TAKEAWAYS

We expect today's fleet of 28,000 aircraft to grow at a CAGR of 3.5% over the next decade

That would see the global fleet increase by 41%, adding an additional 11,500 aircraft

Aviation's centre of gravity will shift increasingly eastwards – half of the global growth in passengers to 2043 will come from Asia Pacific

Indian airlines have 2,000 aircraft on order with a 10-year CAGR forecast of 9.3%

AIRCRAFT ABOVE 100 SEATS + FREIGHTERS

28,000
in 2025

39,500
by 2034

There were almost 28,000 western commercial jets (over 100 seats + freighters) in service at the start of 2025. Of these, almost 20,000 or 71% were Airbus and Boeing narrowbodies.

To understand how this fleet will evolve over *The Next Ten*, we have considered the fleet and traffic forecasts of a number of industry experts including Cirium, IATA, OliverWyman, Airbus and Boeing. Such forecasts use well-established, mature methodologies developed over decades, taking into account macroeconomic activity, local market factors, airline business model evolution, aircraft technology advancements, among other factors.

Our conclusion is that we see this fleet growing at a CAGR of 3.5% over the next decade, which would result in the total global fleet of aircraft (above 100 seats + freighters) growing from 28,000 aircraft in 2025 to 39,500 in 2034, an increase of 11,500.

If we focus on the almost 20,000 aircraft in the Airbus and Boeing narrowbody segment in early 2025, we see this fleet growing by 8,000 or 41% to reach 28,200 by 2034.

The narrowbody fleet is likely to expand faster than widebodies for a few reasons: new generation single aisles offer more capacity and capability, their higher average seat count lowers unit costs and enables lower fares, the LCC business model growth will outpace the general market, and widebody supply remains constrained – there are almost no new widebodies available to lease as of early 2025 with limited slots remaining in the near-term production plan.

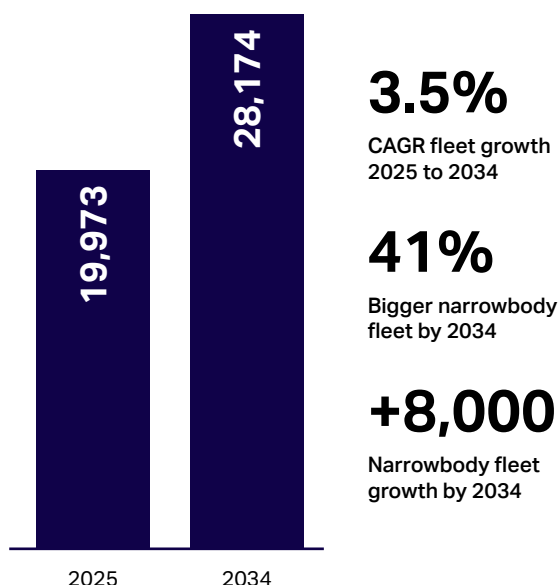


People want and need to fly. Aviation connects people, is a catalyst for trade, enables commerce, and supports communities. Traffic growth will be powered by expanding economies and global population, growing middle class, improved infrastructure and traffic stimulation met by airlines offering new affordable flights.

Airbus' GMF24 forecasts that average passenger traffic growth will be 8.4% CAGR until 2027 with a long-term trend of 3.6% CAGR from 2027 to 2043. Around 45% of new deliveries over the next twenty years will be to replace older less efficient aircraft, with newer more efficient ones – which is the quickest way to reduce fuel burn per RPK.

Sinéad Cormican
Head of Leasing Customers, Airbus

Genesis narrowbody fleet forecast (Airbus and Boeing only)



Source: Cirium, Genesis – using an average of industry forecasts



Cathay Pacific A350-1000 over downtown Hong Kong

Image courtesy of Cathay Pacific

Emerging markets

Emerging markets will be the clear drivers of growth over the decade to come, with Asia Pacific, likely home to two-thirds of overall expansion. IATA expects Asia Pacific to see 2.75 billion additional passengers per year by 2043, twice as much as the rest of the world combined.

In April 2023, India overtook China as the most populous country in the world with 1.4 billion people, who will generate enormous potential for air travel demand. Currently, only about 3% of Indians fly on a regular basis, leaving room for colossal growth when coupled with the nation’s projected GDP expansion. The IMF expects Indian GDP to rise 6.5% during both 2024 and 2025, while Cirium predicts a 10 year traffic CAGR of 9.3%.

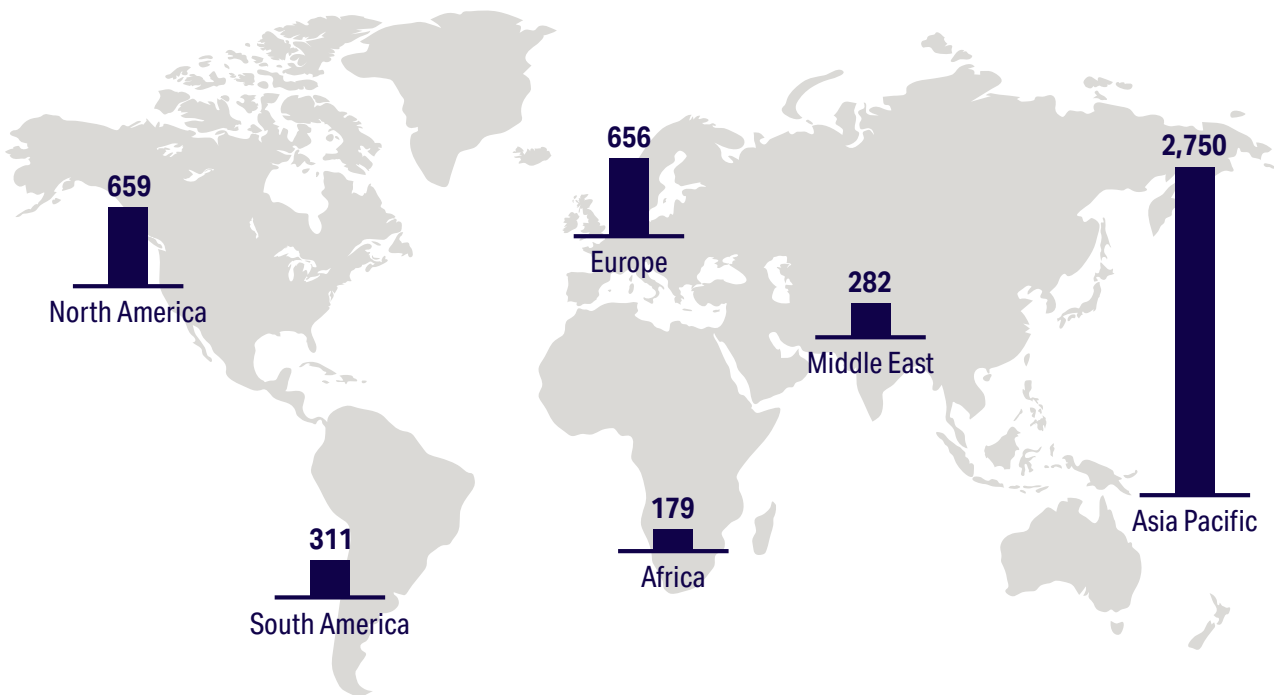
At the start of 2025, India’s incumbent fleet size of 900 jet and turboprop aircraft was less than a quarter the size of China’s fleet of 4,450 aircraft. Major fleet renewals/expansions are underway at resurgent IndiGo, Air India, and newcomer Akasa Air – Indian airlines have almost 2,000 aircraft on new order backlog – and the government’s commitment to the sector and on developing new infrastructure should provide the impetus needed to power strong growth of the Indian aviation market.

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The trajectory of India is remarkable and transformational with the next decade of growth to be propelled by rising middle class income levels. 10 new airports are being built across the country including two major greenfield gateways at Noida International Airport near New Delhi and Navi Mumbai Airport. IndiGo and a reborn Air India are each inducting a new aircraft every week.

Dr Frankie O’Connell
Reader Air Transport Management,
University of Surrey
Author, Air Transport in the 21st Century

Additional passengers by 2043, millions
World = 4,154 million



Source: IATA 2024

Narrowbodies

By early 2025, total orders for new gen narrowbody aircraft had reached 17,430 – just 15 years after the launch of the A320neo in 2010.

That number is already 16% above the total orders achieved by current generation narrowbodies over their 37-year order span between the A320ceo launch in 1984 and last delivery in 2021 (bracketing the 737NG launch in 1993 and last civil delivery in 2020).

New generation narrowbodies have been ordered at a rate of 1,162 per year, or 2.9x the 401 orders per year recorded by the preceding generation – a very clear illustration of long-term growth trajectory of aviation.

CURRENT GEN NARROWBODIES

14,851
orders

Over 37 years (1984-2021)

NEW GEN NARROWBODIES

17,430
orders

Over 15 years (2010-2024)

The mid-size 737-800 (34%) and A320ceo (32%) were the last generation's clear market preference, commanding 66% of overall orders. The A321ceo garnered just 12% of orders.

This time round, there is a far more pronounced preference for larger gauge variants. The A321neo stands tallest, with nearly 7,000 sales or 39% of all new gen orders to date.

2 in 5

Narrowbodies delivered over the next decade will be an A321neo

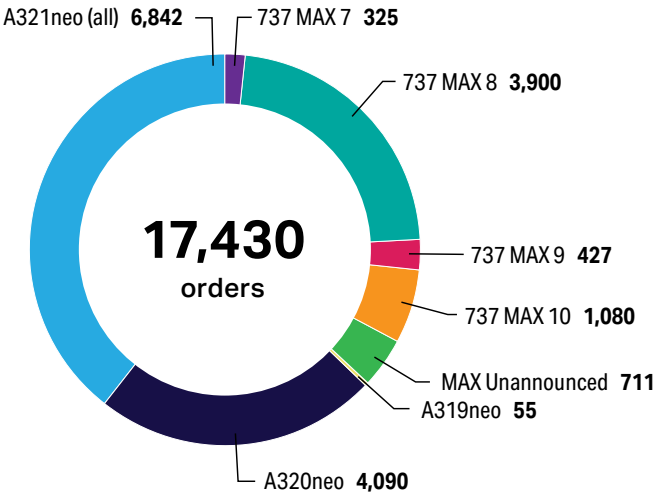
2.9x

Annual Order Intake Rate
A320neo and 737 MAX: 1,162
A320ceo and 737NG: 401

Boeing's bigger capacity narrowbodies, the 737 MAX 9 and 10, have 1,507 orders for a 9% share of outstanding orders (plus 711 more orders with variant unannounced).

The mid-size A320neo and 737 MAX 8 remain highly popular with 23% and 22% respectively.

New Gen Airbus and Boeing narrowbody program orders



Source: Cirium, Jan 2025

In fact, with the A321neo commanding 72% of today's A320neo family backlog, we can see the A321neo eventually accounting for at least 44% of all narrowbody deliveries over the next decade. That would mean that more than two out of every five narrowbodies delivered from now to 2034 would be an A321neo, something of which all portfolio managers should be conscious.

12%

A321ceo
Current Gen
narrowbody
deliveries share

44%

A321neo
New Gen
narrowbody
backlog share

three DEMAND

Given the supply chain constraints being experienced by Airbus and Boeing, does the COMAC C919 offer a possible solution to airlines and lessors seeking narrowbody capacity?

Orders for 1,000 C919s have been placed and there are 16 in service, with 13 delivered during 2024.

COMAC needs to ramp up production significantly to be able to meaningfully replace A320ceo and 737NG aircraft, but it faces the challenge of having many of the same industrial suppliers as Airbus and Boeing (engines, avionics, APU, landing gear etc.), which are already struggling with rising production levels.

While the C919 could go on to become a vital aircraft for the Chinese market – at the expense of future Airbus and Boeing orders – the significant ramp-up that this will entail is unlikely to occur until the early 2030s. To grow beyond China, COMAC will need to establish a credible regional and global parts and training network to support international, high-utilisation operations.



C919 in-service with China Eastern

Image courtesy of COMAC



KLM introduced the A321neo in 2024, which is set to be the aircraft of the coming decade

Image courtesy of KLM

Crossover jets

In the crossover jets space (regional jets/small narrowbodies), the Embraer E2 and Airbus A220 offer compelling economics and capability to replace E190/E195s, 717s, A319s and 737-700s and to grow the overall size of the 100-150 seat market. There were almost 700 crossover jets on order in January 2025.

Both types are increasingly gaining traction with operators and lessors; the E195-E2 recently became the biggest aircraft that can operate at London City Airport while the A220-300 is now routinely operated on routes of over 2,500nm, such as airBaltic's Tallinn to Tenerife and Riga to Dubai.

Widebodies

For widebodies, there is stability in the offerings and no additional programs are foreseen with the 787-9/10, 777-8/9, A350-900/1000 and A330-900 set to be the types that dominate this cycle.

Airlines and lessors held orders for 2,300 widebodies as of early 2025, a total led by orders for 800 787s and 700 A350s. The 2,700 A330ceo and 777-200/-300ERs still in service in 2025 will be prime targets for replacement over the next decade.

It is expected that the 400-seat 777-9, first launched in 2013 and with distinctive folding wingtips, will finally enter service with Lufthansa in 2026, five years behind its original schedule. It is the largest capacity new widebody now available. The A330neo program has seen strong recent sales success – securing new customers Cathay Pacific, flyadeal and IAG and building the backlog to over 200 aircraft. From 2027, there will be just two new-build widebody freighters available – the 777-8F and A350F – which will share the long-haul market. COMAC continues development work on the C929 250-300 seat widebody program.

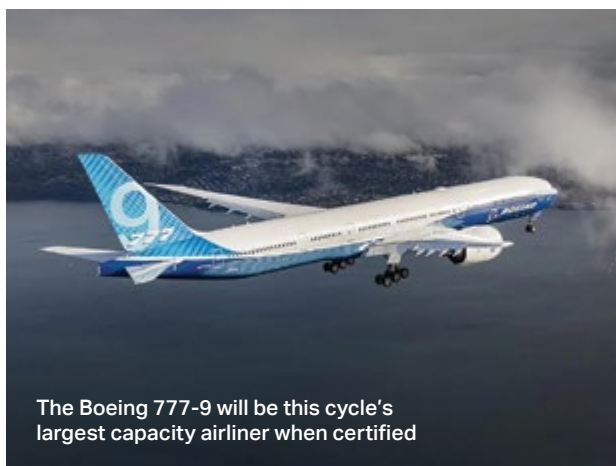


Image courtesy of Boeing



Image courtesy of Embraer



Embraer believes that the sub-150 seat market has never been as relevant as it is today and will be over the next decade. The advanced technology of aircraft like the E2 brings comparable seat costs to latest generation 180-seat aircraft, yet with trip costs that are more than 20% lower. This is an attractive prospect for airlines around the world but is of particular relevance for high-growth markets, with many routes that have outgrown turboprops, but cannot yet justify 180-seat aircraft. As a result of this high growth, Embraer expects to have over one thousand E2s in service by 2035 with a further 300 or so in backlog at that point. The future looks bright for the E2 and for E2 operators.

Alistair Forbes

Marketing Director – Global Leasing, Embraer

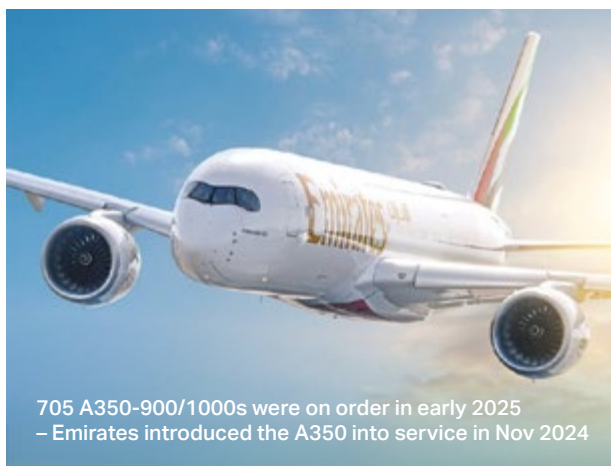


Image courtesy of Emirates



Image courtesy of Airbus

KEY TAKEAWAYS

The structural demand/supply imbalance will take half of the coming decade to resolve

Lost production since 2019 has now reached over 5,000 aircraft

2024 production was 600 aircraft below what the market required to be at equilibrium

The capacity situation is compounded by engine problems – 850 aircraft were grounded in Jan 2025

Given time, we are confident that Airbus and Boeing will solve their supply chain issues and meaningfully raise production levels

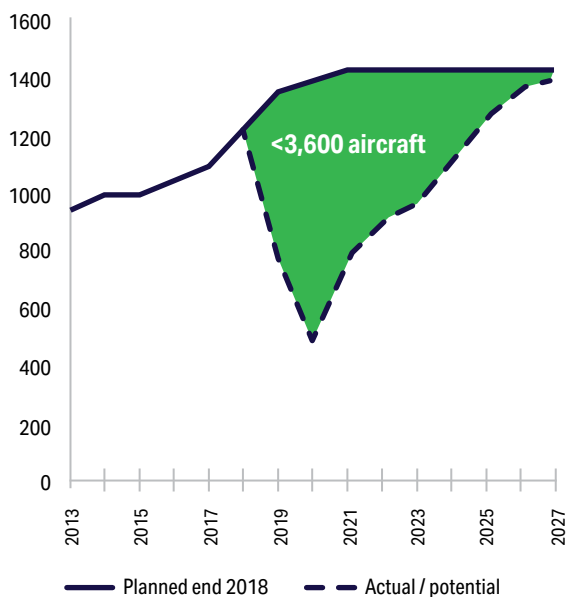
2024 was not a good year for aircraft production, much like the last six years. Four years after the end of COVID, Boeing, Airbus and the engine OEMs continue to suffer production ramp-up challenges and supply-chain issues, which are then being compounded by short-term in-service disruption issues.

The impact has been lost production of 3,600 narrowbodies and 1,300 widebodies since 2019 versus what was intended, a shortfall equivalent to about three years of production. The industry should be delivering about 6% of the in-service fleet each year to be at supply/demand equilibrium to address replacement and growth. But deliveries in 2024 were 3.9% of the fleet size, 600 fewer new aircraft than the industry required.

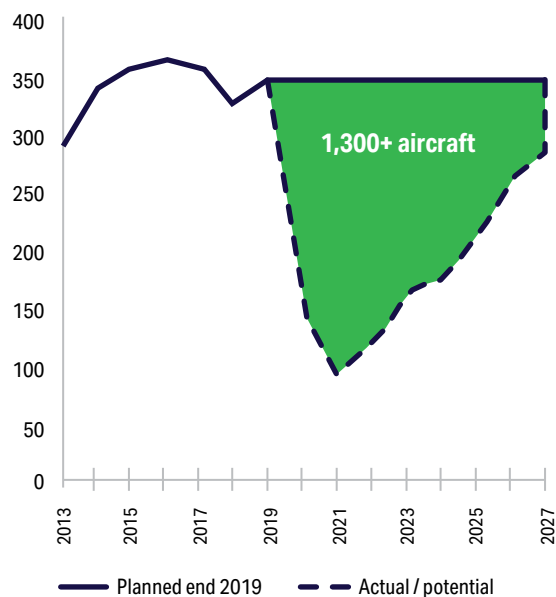
Slow production has led to record backlogs, stretching into the next decade, creating a new conundrum for airlines and lessors considering massive capital commitments for aircraft: it is likely that aircraft ordered today will not be delivered until after the current economic cycle.

We expect that it will take half of the coming decade for these supply problems to be resolved. And even then, unless there is a major dislocation event, the industry will never catch up on all these years of lost production; it is only that the supply shortage issue will stop getting bigger around 2029.

A320 Family and 737 MAX
Production planned vs actuals



Airbus and Boeing widebody
Production planned vs actuals



Source: Airbus GMF

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Over recent years, supply and demand have simply not been in balance. In a healthy environment, the industry needs to produce 6% of the in-service fleet each year – 3% for replacement and 3% for growth. In 2024, that should have been 1,700 aircraft, 600 more than were actually produced.

We have been underproducing since 2020 and it will take until 2028-30 to see this balance restored.

Darren Hulst
VP Commercial Marketing, Boeing

2,300

Passenger & freighter
widebodies on order
Jan 2025

OEM ramp-up efforts

Airbus and Boeing delivered 1,094 commercial aircraft in 2024, compared with 1,233 in 2023. In 2024, delivery volume was down 11% year-on-year, and 32% below the record level set in 2018.

Boeing delivered 333 commercial aircraft in 2024, 260 of which were 737 MAX, at a rate of 22 per month. This included 47 deliveries to China, following a hiatus of five years. It has stated aims to build at rate 38 per month by May 2025, increasing to 52 by autumn 2026 and 57 by mid-2027, which is an ambitious increase in the level of output. Early indications in 2025 are trending positively as Boeing's ramp-up builds towards 38 per month.

Boeing's 787 target production rate is 10 per month in 2028, and it expects to get to seven later in 2025; it delivered 37 787s in 2024, an average of 3.1 per month.

Supply in 2024 was hampered by a 53-day strike by 33,000 machinists; the FAA's mandated production cap at 38 aircraft per month following the Alaska MAX 9 incident, and delayed certification of the MAX 7 and 10 variants. To support this increased production, Boeing plans to open a fourth 737 assembly line at Everett and is re-acquiring Tier 1 supplier Spirit AeroSystems to bring control of much of 737 production in-house. However, at the same time, it has trimmed its workforce by 10% or 17,000 employees.

Airbus delivered 761 commercial aircraft in 2024, 602 of which were A320neo family, a rate of 50 per month. Its ramp-up was meant to take A320neo production from 40 per month in 2020 to 75 per month in 2025. That deadline has been revised twice and is now set for 2027.

The A350 delivered at rate five per month in 2024 and Airbus is planning an increase to rate 10 in 2026 and 12 in 2028, but it has been struggling with various specific supply chain issues. The A330neo is delivering at rate four per month in 2025.

To facilitate delivering this ramp-up, Airbus launched its *Lead!* production improvement program in 2024, involving a hiring freeze, productivity efforts and lower costs. Airbus purchased five factories from sub-contractor Spirit AeroSystems to address delays with A220, A320 and A350 production. With Safran, it purchased the metallurgical group Aubert & Duvall. And, to facilitate growing demand for the A321neo, it opened another final assembly line in Toulouse in the legacy A380 assembly building.

The reality facing Airbus, Boeing and indeed Embraer and COMAC is that they share many of the same Tier 1 suppliers and those further upstream on the supply chain, including material supply and perennially constrained castings and forgings. Engine and cabin interior delays are impacting all programs. Thus, aircraft manufacturers are setting aggressive production schedules at a time when suppliers are having trouble keeping up with lower targets. Boeing's planned production increase for 2025 is ~80%, while Airbus' is ~10%, projections which will not be without challenge.



Image courtesy of Boeing



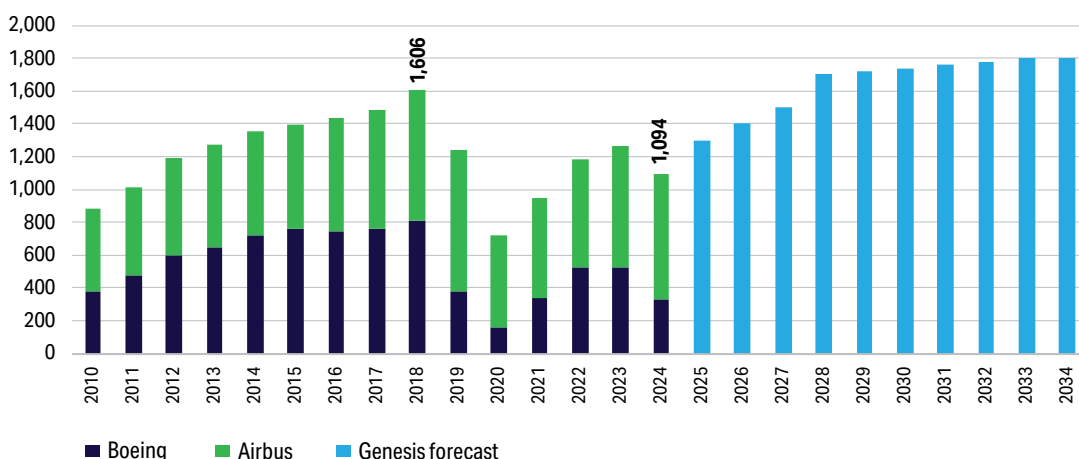
Image courtesy of Spirit AeroSystems

That said, we are confident that Boeing and Airbus will reach their higher production level targets given time, restoring demand/supply equilibrium by around the end of the decade.

Our working assumption is that production of 1,094 aircraft in 2024 will grow to about 1,400 in 2026, surpassing 2018's high-water mark of 1,606 deliveries to reach 1,700 in 2028, and 1,800 in 2033. However, the progress versus announced targets for 2025 up to April has been mixed, and the tariffs issue may further impact OEM performance.

77% of Boeing's 2025 backlog is for export including 27 737 Max for China. 18% of Airbus's backlog is for US customers, according to Cirium.

Airbus and Boeing commercial deliveries (narrowbody & widebody)



Source: Historic data and Genesis forecast



850 new gen aircraft were grounded in early 2025 due to engine issues

Image courtesy of Delta

Engine malaises

To compound these capacity shortfall issues, 850 new gen aircraft were grounded as of January 2025 due to engine issues, including ~630 PW1100G powered A320neo family aircraft (35% of the global fleet) as well as a more manageable ~50 CFM LEAP A1 powered A320neo.

All the new engines that have come to market in recent years – Pratt & Whitney's GTF, CFMI's LEAP and Rolls-Royce's Trent XWB/7000/TEN – have experienced their fair share of operational issues. For some operators, these problems have resulted in arduous on-wing inspections and airworthiness directives. For others, it has meant more engine removals, unplanned MRO visits, grounded aircraft and lost capacity.

A significant share of the overall economic gains these engines promised through fuel efficiency improvements – which they undoubtedly deliver – is unfortunately being eroded by higher maintenance costs and lower aircraft operational availability than previous generation engines. This will have a direct impact on future OEM fleet hour agreements (FHA) programs, on extended guarantees and placing secondary leases.

The overall consequence of this capacity shortfall – borne of new aircraft supply shortages and engine-led aircraft groundings – is that current generation aircraft will be needed to fill the capacity gap for many years to come, flying on for longer and retiring older.

37%

of the A320neo family fleet is currently grounded due to engine issues (Cirium April 2025)

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With the 737NG, the technology is highly reliable, and versus the 737 Classic, you can more dependably predict what the aircraft will deliver in terms of maintenance cost. With the 737 MAX and A320neo, fuel efficiency comes at a price – lower on wing engine life and higher maintenance costs. This is a dilemma for airlines because investing in new technology is a necessary part of the sustainability solution.

Fergus Wilson

Group Fleet & Leasing Director,
ASL Aviation Holdings



five TRANSITION

KEY TAKEAWAYS

Genesis estimates the crossover to 50% new gen narrowbody will happen in 2029

Nine years after EIS in 2016, new gen narrowbodies account for 27% of the fleet in 2025

The result is that current generation aircraft will fly for longer and retire older

7,000 current generation aircraft, such as the 737NG and A320ceo, should still be in service in 2034, down from 13,000 in 2025

Demand for current generation aircraft will remain high into the next decade

Fourteen years after program launch and nine years after first delivery of the A320neo to Lufthansa in 2016, the latest generation of narrowbody aircraft account for 27% of the narrowbody fleet (Airbus is at 36%, Boeing 17%).

At Genesis, we do not see the 50% crossover to a new gen narrowbody fleet being achieved before 2029. This is many years later than was first forecast by OEMs and industry analysts. Airbus will achieve this milestone earlier and Boeing a few years later.

NEW GEN SHARE OF NARROWBODY FLEET

5%
2017

13%
2019

27%
Start of
2025

50%
Genesis
forecast
for 2029

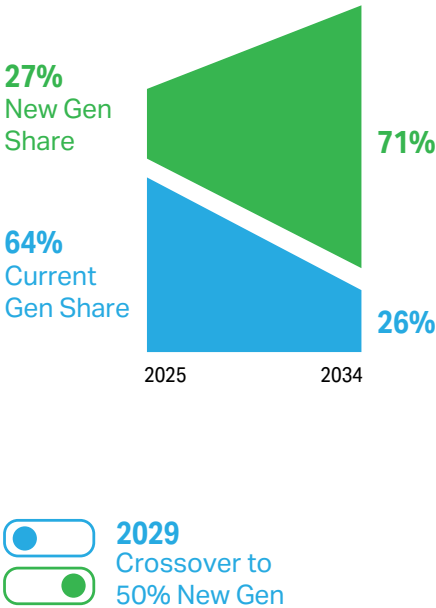
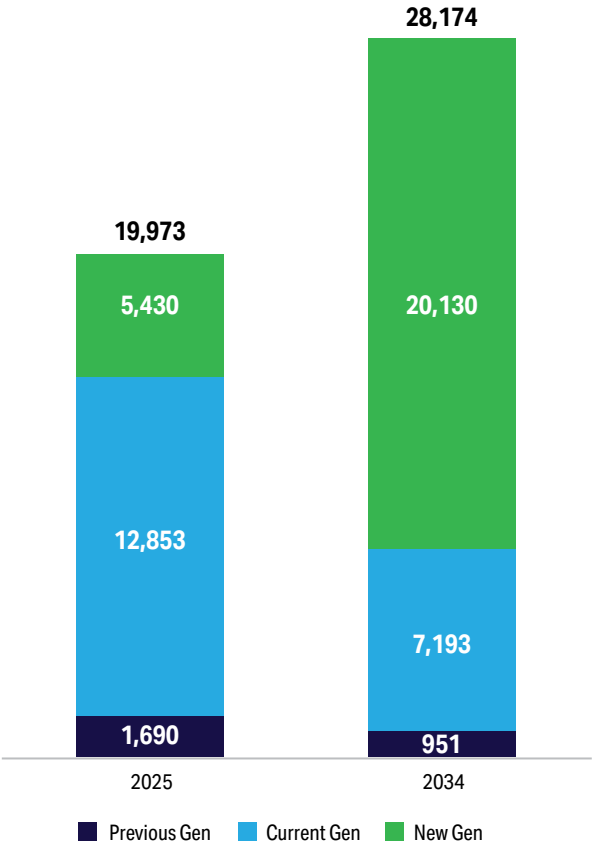
Most of *The Next Ten* respondents expected the crossover point to now happen later because OEM delivery forecasts have been revised multiple times since 2021. The consensus was that the industry's supply chain challenges are clearly deep-rooted, difficult to solve and not all within the OEMs' control, despite their undoubted concentration on ramp-up.

The 27% share of new gen narrowbody aircraft in early 2025 should increase to 71% by 2034 as deliveries accelerate. Current generation aircraft, which account for 64% of today's narrowbody fleet, should fall to a 26% share (with the remainder being a few previous generation aircraft).

The direct impact of a later crossover to new gen equipment will be a delayed retirement for the 13,000 737NG and A320ceo family current generation narrowbodies in service in early 2025. Airlines are remaining fiercely attached to the known capability, cost and reliability of these favoured assets.



Genesis narrowbody fleet forecast (Airbus & Boeing only)



What are the implications for the current generation fleet?

Rising aircraft age

The consequence of fewer new aircraft deliveries is that the average in-service aircraft age is rising. According to data from Airbus, the average age of the narrowbody fleet has been rising steadily for the past four years – increasing from 10.0 years in June 2019 to 11.7 years in September 2024, 17% higher. The average retirement age is now 25.6 years for narrowbodies and 24.1 for widebodies.

Fewer retirements

In parallel to rising aircraft age is the trend of lower aircraft retirements as airlines seek to retain capacity to accommodate strong demand while new deliveries lag. According to IBA data, the typical fleet retirement ratio of 3% per year fell to 0.5% in 2024, an ~80% decrease. We can expect a low retirement trend to continue until the supply of new gen aircraft normalises and exceeds demand.

Higher lease rates and values

Higher demand from airlines amid limited supply naturally gets reflected in higher lease rentals and asset values. The appraiser IBA assesses that lease rates for a 10-year-old 737-800 rose 35% in the last 12 months to the end of 2024 and 42% for a similarly aged A320ceo to around \$225,000 per month. In contrast, lease rates for the 737 MAX 8 were up just 5% and the A320neo just 6%, to ~\$400,000.

Fewer aircraft transitions

Unable to source new aircraft and with fleet groundings to manage, airlines will continue to retain the capacity they have today through lease extensions. This means we will see fewer aircraft transitions in the decade ahead, reducing the market availability of assets. In turn, this scarcity will support higher lease rates and values of both current and new generation aircraft.

Increased airline asset ownership

As well as extending their assets on lease, *The Next Ten* respondents indicate that airlines will increasingly look to gain ultimate control of capacity through asset purchases from lessors. In an uncertain supply environment this permits the airline to have full flexibility on their retirement planning, mitigating fleet capacity shortfalls.

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Globally, 737NGs will be in demand for a while and certainly the same notion applies here at Sun Country. Using the 737NG, we have developed a mathematical formula to determine what a MAX is actually worth to us, and the math does not stretch to Boeing's pricing, so I see the NGs being in our operation well into the next decade.

Thomas Frey

Senior Director Fleet Fuel and Sourcing,
Sun Country Airlines



+1.7 years

Average aircraft age
2024 vs 2019
(11.7 years from 10 years)

-80%

Retirement level
2024 vs typical year
(0.5% vs 3%)

+35%

737-800
Average lease rate
change in 2024

+5%

737 MAX 8
Average lease rate
change in 2024



Ryanair and partner airlines operate over 400 737-800s

Record backlog

Since the launch of the A320neo and 737 MAX, Airbus and Boeing have amassed an unparalleled backlog of orders that has stood in excess of 9,000 units since 2014.

As of January 2025, it had risen to 12,000 narrowbody aircraft: Airbus had 7,300 orders for the A320neo family and Boeing had 4,800 orders for the 737 MAX.

Using a simple assumption of 1,500 deliveries per year (125 per month), 12,000 aircraft would represent almost eight years of production, signalling next order availability to be around 2033. Airbus and Boeing hope to build more aircraft than that, which explains their earlier availability offering. As of early 2025, the earliest availability from Airbus is 2032, and H2 2031 from Boeing.



Heston Airlines does not plan to transition its fleet to new generation aircraft before 2034, anticipating that the technology will be mature by then. Meanwhile, the market for the A320ceo is expected to remain strong until the end of the decade. An increase in A320ceo re-deliveries starting in 2028 should help stabilise lease rates and component prices from their current elevated levels.

Jonas Rinkauskas
CEO Heston Airlines

2032

Earliest A320neo family availability

2031

Earliest 737 MAX availability



Heston Airlines is headquartered in Lithuania and operates a fleet of A320ceo, providing short and long-term services worldwide

Generation crossover

Understanding the pace of fleet crossover from one generation to the next is crucial to every asset manager's portfolio strategy. It takes a long time for the industry to meaningfully crossover to a new aircraft program. We expect this generation of new gen narrowbodies will take thirteen years from their EIS to reach 50% penetration of the fleet (2016 > 2029).

OEMs have typically launched a new program about once every eight to 10 years, as it involves enormous risk and investment. Typically, a step-change in technology is required to justify such a thoroughly researched launch decision.

The A320neo entered service five years after it was launched, benefiting from being a derivative design. Similarly, the Embraer E2 derivative took five years to EIS. The 737 MAX entered service six years after it was launched, a longer gestation reflecting the more significant design upgrade that was required from the 737NG. The only clean sheet narrowbody programs of the last few decades – the A220 and C919 – took eight years and fifteen years from launch to EIS, respectively.

In our view, there is no prospect of a new aircraft program being in service by 2034. When the next program is eventually launched, its EIS will be closer to the end of the 2030s or the early 2040s. Reaching a critical mass of 50% of the installed fleet will take until at least 2050. Therefore, no impact on today's fleet and values is foreseen by a new program launch.

When it does come, the next all-new narrowbody program is most likely to come from today's leading OEMs in Airbus and Boeing. Or possibly from Embraer, which is currently seeking investment partners now that the E2 is well established in the market. Or could it be from a new market entrant?

The next decade will be crucial for the development and maturation of new technology to enable any future launches in the 2030s – in terms of propulsion, materials and fuel sources. This will be heavily dependent on the engine OEMs and their ability to develop a step-change in technology with either a significant reduction in specific fuel consumption or an alternative propulsion system (hybrid, hydrogen, battery, otherwise).

CFM has introduced the RISE (Revolutionary Innovation for Sustainable Engines) program, a geared fan, hybrid electric solution which will be compatible with today's energy sources as well as SAF and hydrogen, but which will require new thinking as regards airframe design. EIS readiness is not planned before the mid-2030s.

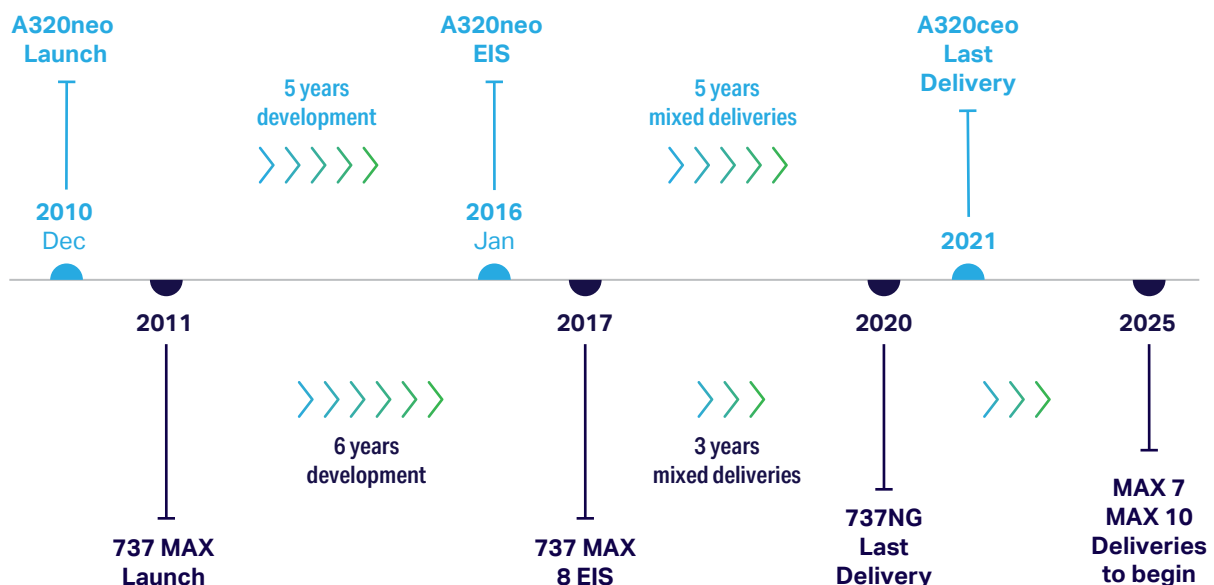




Image courtesy of CFMI

CFM is progressing its RISE research program, aimed at delivering least a 20% fuelburn efficiency improvement



Toggling back towards more vertical integration

Supply chain challenges represent the greatest uncertainty faced by aviation. The pre-pandemic period saw the industry pivot towards outsourced, decentralised, low inventory business models as it went in search of ever lower costs and efficiencies, when labour was experienced, and trade was freer.

The impact of those choices has revealed how fragile the supply chain really was – evident through delivery delays, rapid cost inflation, quality fails and other unintended consequences. The era of just-in-time and lean manufacturing has come to end in aviation. The future will instead be built on deeper, less transactional relationships with suppliers, strategic inventory, building up stocks of raw materials and de-risking the supply chain by securing multiple suppliers. The beginnings of these trends is already apparent:

- Boeing’s re-acquisition of Tier 1 supplier Spirit AeroSystems, a business it had sold in 2005.
- Airbus acquisition of Spirit AeroSystems facilities linked to A220, A320 and A350 production, and its purchase, with Safran, of the metallurgical group Aubert & Duvall.
- AirAsia’s development of a leading regional MRO business in ADE to bring most maintenance in-house; its maintenance had been almost 100% outsourced in 2019.
- Ryanair Holdings has revealed the company will invest up to \$600 million to move some of its engine maintenance operations in-house over the next five to ten years.

When we launched Emerald, we chose to in-source ground-handling and catering because of the critical nature of our network with connections to the Aer Lingus transatlantic hub. Potential partners could not commit to our essential on-time performance (OTP) prerequisite, so we felt had no alternative.

That said, out-sourcing should normally be the more efficient route to lower costs. Airlines should be wary of electing to in-source capabilities en masse because internal costbases have a tendency to quickly rise and are then harder to tackle than outsourced contracts.

Conor McCarthy
Chairman Emerald Airways



Image courtesy of Emerald Airways



Six AIRLINES

Image courtesy of Turkish Airlines

KEY TAKEAWAYS

IATA is forecasting that airlines will post record profits of \$36.6 billion in 2025, quickly recovering from their worst ever crisis but this outlook may need to be revised downwards if tariffs become permanent

LCCs will continue to leverage their cost advantages to grow from a third of seats to 40% over the next decade

FSCs will increasingly leverage network strength, global alliances and loyalty programs to drive profitability

Well-run specialty airlines – both independent and aligned – will continue to thrive

Airline consolidation will endure, through mergers/takeovers but also through equity partnerships, JVs and anti-trust immunity alliances

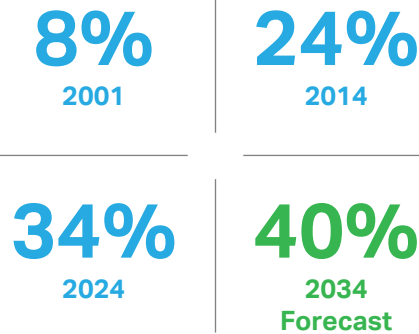
Relentless LCC growth to continue

The LCC business model has been the engine of rapid airline growth for the last thirty years. LCCs are now very much mainstream and global, comprising 114 airlines. Their share of worldwide seats has risen from 8% in 2001 to 24% in 2014, to 34% in summer 2024, according to OAG.

LCC penetration rates vary across the world, contributing more than half of airline capacity in 21 countries, particularly in Southeast Asia and Eastern Europe. LCC share is as high as 71% in India and 64% in Indonesia, or as low as 12% in Germany and 22% in Japan.

Full-service carriers (FSCs) have had no choice but to respond competitively. Some have established their own LCCs to challenge the land grab of LCCs – with notable success seen at Qantas (Jetstar), Turkish Airlines (AJet) and IAG (Vueling). Others, such as Aer Lingus, have elected to move their core business models closer to LCCs, offering similar fares, seat comfort and paid ancillary services.

LCC SHARE



ASKs, Source: Historical OAG, Forecast Genesis



LCCs have captured a 22% share of the Japanese market

In 2024, the LCC model in some markets came under pressure. Too much capacity in a higher operating cost environment saw Spirit, JetBlue, Frontier and Southwest have a challenging 2024 with investor pushback, share value falls, disappointing earnings and Spirit's eventual Chapter 11 filing. Some US LCCs have recently reacted by adding more premium elements to their product to chase yields, potentially losing their focus on cost leadership, the essential pillar of the LCC/ultra low-cost carrier (ULCC) business model.

Overall, we expect the LCC business model and the lower fares it enables to continue to propel global traffic growth, underpinned by a relentless focus from operators on cost control. LCC market share will continue to expand, driven by emerging markets with rapidly growing populations like India, the Philippines, Indonesia and Brazil.

We forecast the global LCC sector share to reach 40% of seats by 2034, with less inroads made in certain developed markets where FSCs will continue to defend steadfastly.

At the heart of LCCs is a simple proposition: offer a mostly basic service between two markets with the (perceived) lowest airfare, usually (but not always) operate a single type aircraft, maximise the number of seats, stretch aircraft utilisation through quick turnarounds and short sector lengths, and charge for additional services like preferred seating, checked luggage and food.

FSCs will leverage network, loyalty & alliances

While LCCs have been instrumental in driving passenger growth numbers, FSCs have not been idle. They have been busy ring-fencing customers by focusing on unmatched network strength, leveraging their loyalty program advantage and cementing their global alliance benefits. We expect all these trends to continue and FSCs to continue to be pillars of the industry.

Network strength

FSCs control the medium and long-haul routes of the world from their leading hubs such as Atlanta, Dubai, Dallas Fort Worth, London Heathrow and Hong Kong, which are largely ring-fenced from LCC market encroachment. For instance, IAG's five airline brands serve 274 destinations from four hubs (Heathrow, Madrid, Dublin and Barcelona) where they have leadership positions while having a strong presence on North Atlantic, South Atlantic and intra-European routes.

Global alliances

The FSC sector is dominated by three key alliances: oneworld, Skyteam, and Star. Alliance revenue represents about 57% of global airline revenue. Given these alliances have been highly stable since their

foundation, with only a limited number of exits and movements (recently, SAS from Star to Skyteam, LATAM leaving oneworld, Virgin joining Skyteam), we can reasonably expect their share of global revenue to remain above 50% over the next decade.

Airline loyalty

Airline loyalty is big business. It comes in two main forms – airline-controlled frequent flyer programs (FFPs) to drive customer retention and co-branded credit cards to drive revenue. The four biggest US airlines generate more than \$20 billion in combined loyalty revenue. In 2023, Delta received \$6.8 billion in revenue from American Express (equivalent to the revenue of Ethiopian Airlines) on its co-branded Delta Amex card, in a year when it made adjusted income of \$4 billion. According to Visual Approach Analytics, the 'airline' portion of Delta runs at a 10% loss, but adding in loyalty, travel services, and miscellaneous revenues, the company runs at a 9% profit.

The number of global frequent flyer accounts is estimated at 1.9 billion, with the biggest FFPs in the US and China: Delta has 130 million members, American 120 million, United 110 million and China Southern 99 million. Loyalty will serve as a key asset in the arsenal of FSCs as they compete with LCCs; a well-run, revenue-additive loyalty program, partnered with credit card suppliers is something few LCCs can match. While this sector is highly developed in the US, there is enormous opportunity for airlines in other regions to replicate best in class loyalty, within the constraints of regional banks not offering the same scale as seen in the US and China.



Virgin joined Skyteam in 2023

Image courtesy of Virgin Atlantic/Skyteam

57%

Star Alliance, Skyteam and oneworld were responsible for 57% of global airline revenue in 2023

\$20 billion

The four biggest US airlines generate more than \$20 billion in combined loyalty revenue

Speciality leaders will thrive

Beyond the space occupied by fast-expanding LCCs and global reach FSCs, a key third airline category that will continue to prosper over the next decade is well-run specialty airlines. Often smaller in size than the first two groups, they have nonetheless built strong, defensible leadership positions within their niches.

Simplistically and while accepting there is often some overlap, specialty airlines can be segmented into two distinct groups – those that are predominantly independent brand players within their niche, and those that are predominantly service providers aligned to support other carriers by providing capacity.

The world will continue to need both groups: major carriers are simply not set up to profitably operate commuter aircraft to smaller cities so will contract feed from regional service providers; aircraft, crew, maintenance, and insurance (ACMI) operators will remain in demand to provide capacity to cover for peak season demand, aircraft shortages, or interim lift; there will always be demand for fully inclusive leisure travel to sun destinations; and cargo specialists will go on being global leaders within their fields. Some examples of leading specialty airlines below.

Independent

REGIONAL:



LEISURE:



CARGO:



Service providers

REGIONAL:



ACMI:



CARGO:



TUI 737 MAX

Image courtesy of TUI Airlines



ASL Airlines 737-800BCF

Image courtesy of ASL Airlines

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The airline market is inherently volatile, ensuring a consistent demand for ACMI capacity. While the ACMI model is not new, it has, over the past decade, become an integral component of European, Central Asian and North and Central Americas airlines' long-term capacity planning. The next strategic move for ACMI airlines is to extend this model globally.

Jonas Rinkauskas
CEO Heston Airlines

Airlines will continue to have cost concerns

Revenue generation and growth are always a focus for airlines; however, maintaining control of costs is probably airlines' number one concern in early 2025. Expenses grew 9.4% in 2024 and will rise another 4.0% in 2025, according to IATA.

While airlines have been able to pass some of these costs on to passengers through higher fares and fees, there's a balance they need to strike to remain competitive. In many regions, airlines are facing labour shortages, leading to higher wages to retain pilots, crews, and ground staff.

The industry is still experiencing significant supply chain delays, especially in terms of new aircraft, grounded aircraft, increased cost of aircraft parts and maintenance services. OEM escalation is increasing spare part prices by 10% or more in some instances. Airlines are also grappling with inflationary pressures that affect everything from maintenance to ground services. There's a limit to how much airlines can raise fares before impacting passenger demand.

Airlines are living with the daily impact of new aircraft delivery delays, aircraft grounded due to engine reliability issues, increased cost pressures for maintenance and parts, the ownership costs of new aircraft that are not in operation, the costs for leased- in ACMI capacity and delayed or cancelled flights.

These challenges create an enormous strain on airline resource planning – endless network reshuffles, route cuts and passenger compensation; engineering engagements managing aircraft groundings and storage, engine removals, swaps, and ferry flights; sourcing short-term leases and ACMI capacity hires; managing the legal recourse with OEMs, engine suppliers, and contracting new lift from lessors and ACMI providers. Unfortunately for airlines, this situation looks like it will continue for a number of years.



Korean Air acquired Asiana Airlines

Image courtesy of Korean Air

Expect more airline consolidation

The significant level of airline consolidation seen over the past decade has helped the industry respect disciplined capacity growth, which led to record profitability from 2010 to 2019. We are likely to see this consolidation trend continue in the decade to come, boosting airline profitability by optimising capacity, streamlining networks and realising cost synergies.

Consolidation can come in different forms: an outright acquisition, of course (such as Tata Group's purchase of Air India in 2022 which was consolidated with Vistara), but also other forms of cooperation that may be more suitable for cross-border growth. This includes equity investments, joint ventures, partnerships and metal-neutral revenue sharing structures like the lucrative trans-Atlantic anti-trust immunity alliances of British Airways-American-Finnair-Iberia, Lufthansa Group-United-Air Canada and Delta-Air France/KLM-Virgin Atlantic-SAS.

For example, Delta acquired Northwest in 2008, but ever since then has grown internationally by building a global airline system through acquiring equity shares in Aeroméxico, Korean Air, Air France/KLM, LATAM, Virgin Atlantic and WestJet.

In North America, the US airline market is the world's most mature, with 80% of seats provided by four major airline groups. It seems unlikely that these four carriers would receive anti-trust approval for further growth through acquisition, which means that future consolidation is more likely to occur through strategic alliances or within the remaining 20%. Within this group, Alaska's acquisition of Hawaiian was approved in September 2024 (retaining both brands), regional capacity providers Republic and Mesa agreed to merge in April 2025 with a combined fleet of 300 E-Jets, yet jetBlue's pursuit of Spirit was rejected in February 2024 on antitrust grounds, leaving jetBlue to consider other options.

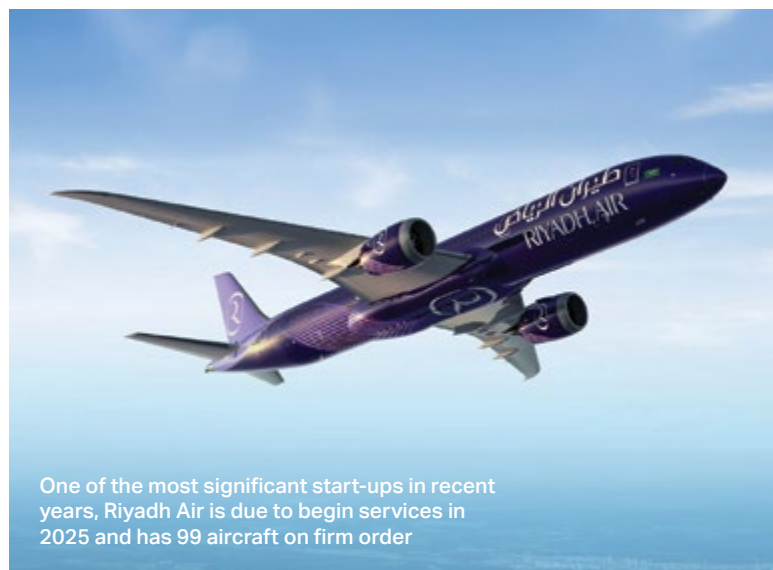
Canada's domestic market has become significantly more competitive in recent years. Air Canada's domestic capacity share contracted from 75% in 2001 to 43% in 2024. WestJet acquired Sunwing in 2023, Lynx exited the market in 2024, and in May 2025, Delta and Korean Air announced the purchase of 25% of WestJet.

Latin America is dominated by the Mexican and Brazilian domestic markets, and has already seen considerable cross-border consolidation, as well as the exit of some weaker carriers, including Azul's purchase of Avianca Brazil and Avianca's parent ABRA's purchase of 54% of GOL. Most recently, Azul and GOL signalled their intention to merge to create the dominant carrier in Brazil with a 60% domestic market share. The region's profitability continues to be challenged though, suggesting additional consolidation opportunities. Over the next decade, the market is likely to be dominated by ABRA, LATAM, COPA and the carriers of Mexico. A key barrier to further airline expansion as well as passenger choices is the lack of a single Latin American Sky aviation agreement, which would allow the liberalisation needed to operate flights under 5th, 6th and 7th freedom rights.

In Europe, the market is more fragmented, and consolidation is progressing more slowly. However, mergers look likely given competition from budget airlines and the financial strain on legacy carriers in the wake of the pandemic. Four major airline groups (Air France/KLM, IAG, Lufthansa and Turkish) vie with the unit cost strength of three major LCC groups (Ryanair, Wizz Air and easyJet). Lufthansa purchased a 41% stake in Italy's ITA and 10% of airBaltic, Air France/KLM bought 19.9% of SAS, ABRA acquired Spain's Wamos, but IAG scrapped plans to buy Air Europa following EU pushback. Candidates for future consolidation are likely to include TAP Air Portugal, Finnair, Air Europa (again), SAS, LOT, Aegean, easyJet, Volotea and Jet2.

Asia Pacific is where most industry growth in the next decade will happen, so there is huge opportunity to secure beachheads in fast-expanding markets. However, cross-border consolidation in Asia tends to be challenged by the regulatory landscape, which limits majority foreign ownership of airlines, and by integration challenges across cultures. Domestic takeovers should ostensibly be more straightforward, yet Korean Air's acquisition of Asiana (and its LCC subsidiaries) needed 14 different worldwide approvals and required the sale of its cargo business. That said, Cathay Pacific acquired its hometown LCC rival, Hong Kong Express and Qantas purchased National Jet Systems. For cross-border growth, minority shareholdings and alliances may be a better path rather than outright acquisition, such as Qatar's 25% stake in Virgin Australia. Expect consolidation to happen more slowly in Asia Pacific.

The Middle East and India are a hot bed of aviation activity as 2025 starts, with the renewal of Air India continuing apace through the leadership of Tata Group (having absorbed Vistara and AirAsia India), and the global ambition of Riyadh Air. Both have placed significant orders for new aircraft and are keen to surf the rapid growth opportunity of the growing middle classes in India and Saudi Arabia. The sixth freedom global hubs of Emirates, Qatar Airways, Etihad Airways and Turkish will continue to be a highly efficient way to connect the world one-stop, and a real competitive challenge to the long-haul airlines of Europe and Asia.



One of the most significant start-ups in recent years, Riyadh Air is due to begin services in 2025 and has 99 aircraft on firm order

Image courtesy of Riyadh Air

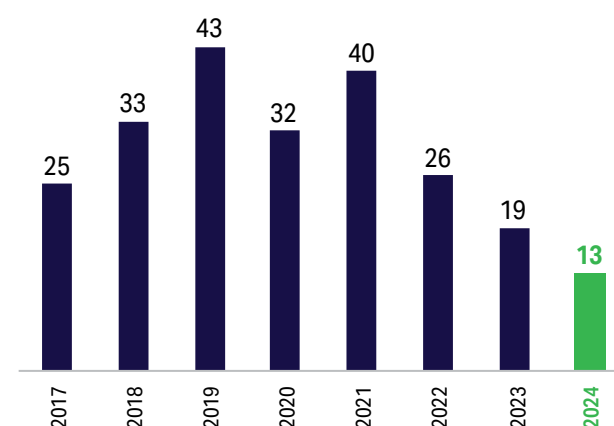
Expect fewer start-ups

In parallel to a world with fewer overall airlines is a forecasted decline in the number of start-up airlines that will successfully launch in the years ahead.

According to Iskha, just 13 new airlines launched in 2024 (mostly regional, turboprop carriers), which is a historic low. One of the most significant in size was Saudi Arabia's Riyadh Air, which has 60 A321neo and 39 787s on firm order. This compares with 31 airline launches per year on average between 2017 and 2023.

We see this trend continuing as the barriers to entry - such as access to aircraft - remain high and pockets of new growth opportunities become harder for airline entrepreneurs to find. At the same time, 16 airlines closed their doors in 2024 and 18 in 2023.

Airline start-ups by year



Source: Iskha

Airline product evolution

The direction of the on-board product landscape seems to be relatively established, and airlines will spend the next few years configuring their aircraft to these standards.

Narrowbody

The growth of the LCC business model and the consequent competitive reaction by FSCs has seen a blurring of product distinction and an increasing share of aircraft with a simplified all-economy product and minimal customisation of seats, galleys and lavatories. Such cabins will continue to become increasingly densified, through thinner and lighter seats, lower seat pitch and cabin monument innovations. For example, Airbus' SpaceFlex maximises seatcount by trading galley and lavatory real estate for revenue cabin space. Both OEMs have modernised their cabin designs and expanded overhead bins to allow more trolley bags, helping turn-times and enabling more airline ancillary revenue. Many airlines have been keen to introduce connectivity solutions such as complimentary on-board Wi-Fi, streamed entertainment options and/or seatback IFE.

With more range and attractive trip costs, the latest narrowbodies are being deployed onto ever longer routes, enabling new city-pairs like Dublin-Nashville with the A321XLR (Aer Lingus) and Singapore-Busan (SIA) and Cairns-Tokyo Haneda (Virgin Australia) with the 737 MAX 8. Some of these longer routes will be flown by LCCs with high density layouts. For example, Wizz is configuring its A321XLRs with 244 seats. Others will be flown with 2-class layouts featuring an improved definition of narrowbody business class, designed to offer comfort close to that of widebodies, 1-1 full-flat bed seating with access to the aisle.

Widebody

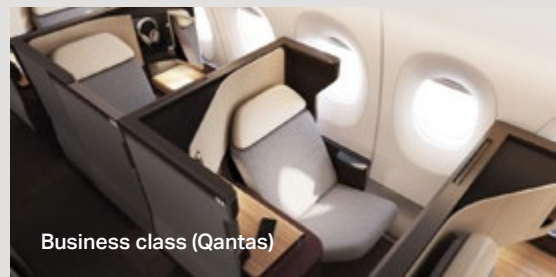
While their short-haul product often seems to be converging with that of LCCs, it is on long-haul where FSCs get to flex their muscles and demonstrate their brand and product differentiation. Based on launches over the past three years, there now seems to be a level of consensus among long-haul carriers about the future definition of on-board hard product. Airlines without this combination in place are likely to have a less competitive offer and will have to price accordingly. Premium offerings combined with loyalty programs will remain important for competitive advantage on long haul services:

First class suites: the ultimate in privacy and luxury offered only by select Asian, Middle East and European airlines and only on specific high yield markets



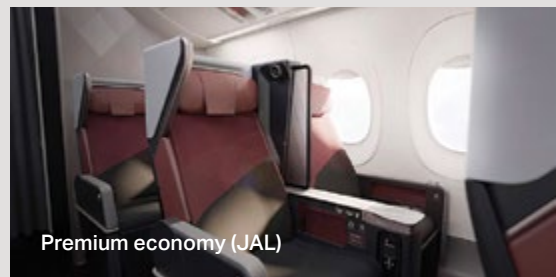
First class (Lufthansa)

Business class suites: the premium mainstay for most long-haul airlines, with direct access to aisle for all seats, full flat beds, and increasingly, privacy doors



Business class (Qantas)

Premium economy: the highest-value aircraft real estate, fares ~2x Economy but space needed ~1.4x



Premium economy (JAL)

Economy: dense seat layout with seatback video on demand (13" screens) and internet access



Economy (Etihad)



The longest route

From 2027, Qantas' Project Sunrise will see the introduction of the first nonstop services from the east coast of Australia to Europe and New York. With flight durations expected to exceed 20 hours, these will be the longest flights in the world, operated by a fleet of 12 new 238-seat A350-1000s. For the first time, passengers will have a non-stop alternative to the multi-stop itineraries that have characterised flights to/from Australia through history to date.



Images courtesy of Qantas

Qantas' A350-1000 is due to launch Project Sunrise nonstop service in 2027

Innovation will drive ancillary revenue and efficiency

Ancillary revenue (AR) has enormous potential to further drive airline profitability in the decade to come. AR has now surged past pre-pandemic levels: the top 10 airlines generated \$54 billion in AR in 2023, far above the \$38 billion of 2019. Most airlines still have enormous untapped potential to drive revenue through building one-stop shop connections with their lucrative customer bases, through dynamic packaging. Today, only 1% of airline website users book a hotel but 8% book a rental car.

For instance, AirAsia's Move app allows users to book everything from travel, events, ride hailing to food delivery. On Qantas' website, you can buy health, car and home insurance. Airlines will embrace the potential for dynamic packaging in the decade to come using AI tools.

\$54 billion

Ancillary revenue (AR) has now surged past pre-pandemic levels: the top 10 airlines generated \$54 billion in AR in 2023, far above the \$38 billion of 2019

Away from ancillary revenue, AI will help transform airline processes over the next decade. AI is highly suited to airlines due to the complex, data-intensive nature of their operations and is likely to impact the aspects below.



Operational efficiency

Flight scheduling, fuel optimisation and predictive maintenance



Customer experience

Personalisation, customer support through virtual assistants



Revenue management

Dynamic models to analyse demand, competitors, historical trends in real time



Safety enhancements

AI-powered monitoring systems, optimised flight planning



Ground operations

Predictive algorithms, robotics for passenger flow management, baggage handling



seven LESSORS

KEY TAKEAWAYS

Lessors will finance over \$500 billion of new aircraft assets in the decade to 2034

Aircraft lessors were guardians to \$440 billion of aircraft assets in early 2025, half of which were managed from Ireland

Consolidation will continue as lessor seek scale and some investors look to capitalise

The market structure will crystallise around scale, speciality and middle of market players

There is a growing need for lessors to have deep capability across the lifecycle

Lessor market to continue to grow

Lessors manage 52% of the global fleet as of early 2025: 51.8% by share of fleet, 56.1% by indicative market value, according to Cirium, April 2025. The majority of *The Next Ten* respondents felt that leasing's share of the market would continue to edge upwards over the decade.

Operating leasing will always have sound, structural advantages for airlines. Airline balance sheets were highly stressed by COVID and will take many more years to fully recover, meaning that for many treasurers, leasing is the optimum way to add aircraft capacity.

With OEMs struggling to deliver new aircraft, many airlines will continue to turn to the leasing channel to ensure the capacity required. And, with a fleet that will grow by over 40% over the next decade, it is clear the absolute size of the leased fleet will also be much bigger.



Leasing's share of the aircraft financing market will continue to grow. Airline equity will guide operators towards an asset-lite, off-balance sheet strategy, for which the flexibility and efficiency offered by leasing is unmatched.

Bank of America
For The Next Ten



Consolidation will continue as lessors add scale, reach

In early 2025, the leading aircraft lessor had a 13% share of the market. In fact, the top 5 lessors combined had just 34% of the leasing market. Despite being a 52-year-old sector, leasing remains significantly fragmented, with scope for significant further consolidation.

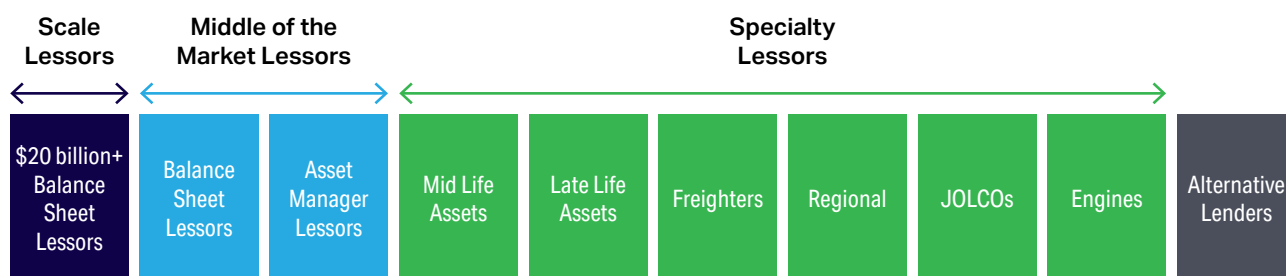
Strong performance by the leasing industry attracts new investors with the ability to consolidate. Similarly, downturns tend to see lessor M&A activity accelerate and the post-pandemic period was no different, set off by the AerCap's 2021 acquisition of GECAS for \$30 billion. SMBC acquired Goshawk for \$6.7 billion in 2022 to create the second largest lessor; Avilease accelerated its market entry with the 2023 purchase of Standard Chartered for \$3.6 billion; Avolon bought a Castlake portfolio for \$5 billion in September 2024; and DAE purchased NAC for \$2 billion in February 2025.

Besides opportunistic M&A activity, there have been no noticeable lessor failures in recent years, although lessors had to deal with two seismic disruptions that impacted their businesses – the COVID pandemic and \$12 billion of Russian asset seizures. This clearly demonstrates the scale of the sector's resilience and its importance to airlines and governments. Though profitability was challenged in the short-term, the leasing sector remained a stable and trustworthy cornerstone of aviation.

By 2034, we predict there could be five scale lessors with portfolios of \$25 billion+ up from three today, and that the top 5 market share current market value (CMV) will exceed 40%, up from 34% today.

The lessor market structure will evolve

We expect a level of evolution in the structure of the lessor competitive landscape, a continuation of the trends developing over the past decade.



While the names and logos of some lessors may change through acquisitions and mergers, the overall structure of the lessor landscape seems to be crystallising around three defined groups:

Scale lessors

The size or scale of a lessor is important, offering larger lessors global presence, with broad and deep airline relationships and access to market opportunities; access to a broader range of funding alternatives and to lower cost, more flexible debt; the ability to participate in larger placement and/or sale/leaseback (SLB) deals; leverage with OEMs; cost efficiencies; and the ability to attract top talent. There are only three lessors with \$25 billion+ aircraft portfolios today. We predict that by 2034, there will be five.

Specialty lessors

The most exciting and fast-growing lessor space is from specialist offerings that offer more operationally intense solutions to airlines. Here, despite their smaller overall sizes, lessors can achieve leadership positions in their niches. Specialist sub-segments include:

- mid-life asset lessors
- late-life asset lessors
- freighter lessors
- regional aircraft lessors
- engine lessors
- Japanese operating lease (JOL/JOLCO) providers

Each of these sub-segments will have its own, specific market dynamics, and many lessors will be present in multiple sub-segments.

For instance, there has never been a better time to be an engine lessor with an increase in out-of-sequence engine shop visits creating a spike in demand, lifting lease rates and values. Lessors with a focus on mid-life and late-life assets are also seeing high demand for their portfolios as asset and components values rise, which is expected to last through the end of the decade.

Middle-of-the-market lessors

Middle-of-the-market (MOM) players manage asset portfolios of up to \$15 billion and/or fleets of up to 400 aircraft. These include balance sheet players with assets on-book; asset managers, overseeing aircraft investments on behalf of third-party owners (insurance companies, pension funds, private equity); some have their own orderbooks, but most rely on the SLB and trading channels to source aircraft; and some are investment grade, which allows them access to a broader array of funding channels, ostensibly at lower cost.

While their asset management and funding models may differ, their offer to airlines often looks much the same. Most offer sale and lease backs (SLBs) and trading, while some offer finance leases and pre-delivery payments financing. With so many competitors and few points of real and valued differentiation, MoM players need to be wary of being squeezed over the next decade – from both above and below. While they have quasi-global reach and customers, most MoM lessors do not have the cost of capital or buying power strength of the scale lessors. Many will be excluded from orderbooks in the future as OEMs reduce access to the lessor supply channel. At the same time, they are often not as focused or nimble as the specialty lessors.



The market needs more lessors which are willing to customise their offering around the unique circumstances of their customers. For example, a standard operating lease does not work with Sun Country's fleet strategy because we will be the last operator of any aircraft in our fleet, so we require a path to ownership in all of our deals.

While we have had great success getting the aircraft we need, thanks to a small group of strategic partners, we still would like to see a wider array of instruments out in the market to facilitate more options as we continue to grow.

Thomas Frey

Senior Director Fleet Fuel and Sourcing,
Sun Country Airlines

The growing need for deep capability across the lifecycle

There is a clear and growing demand for deep capability across the full lifecycle of an aircraft leasing investment to generate above market returns and provide a broader service offering to airlines. As the aircraft asset base continues to fly on for longer and age, maintenance requirements grow exponentially.

At the same time, new gen assets are proving far more complex than expected, with engine removals, spares management and repairs to consider. At the end of asset life, part-outs and component re-cycling will reach numbers not previously seen (19,000 aircraft in the next 20 years according to Airbus).

Managing assets across the lifecycle, managing green time and extracting the maximum value from aging assets requires deep-domain expertise – something that is not present at every lessor.

Those lessors that are operationally intense and that possess deep-domain, in-house technical capability – concerning the asset type, asset maintenance history, lease structure, and future values (airframe, engines and components) will be able to continue to deliver above market, outsized returns for their investors.



Image courtesy of Sun Country

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Predominantly current generation portfolios like that of Genesis are in a great spot right now. They have the right balance between time-tested performing older assets and the newer assets that are required as part of any portfolio's ongoing transition. ReGEN is a very exciting initiative given current shortage of parts and the early insights into any eventual changes in spares pricing it will provide [Genesis].

Michelangelo A. Raimondi
Managing Director, Morgan Stanley

\$25 billion+

There are only three lessors with \$25 billion+ aircraft portfolios today. We predict that by 2034, there will be five

Specialty lessors

The most exciting and fast-growing lessor space is at specialist offerings that offer more operationally intense solutions to airlines

Reduced influence of orderbook lessors

Lessors had 2,124 Airbus and Boeing aircraft on order at the start of 2025, which represents 16% of the OEM backlog. This is lower than the historic norm – it was typically over 20% a decade ago.

Lessors with their own orderbooks will always be valuable to airlines, providing crucial new generation capacity that be contracted years in advance. However, in recent years, OEM delivery delays have created a contractual mismatch with lessors' agreed delivery timelines with their customers.

Both major OEMs have been diligent since the pandemic in a concerted effort to manage the share of orders allocated to lessors, as they prioritise sales to airlines. There were just 17 lessors with orderbooks as of early 2025. Both Airbus and Boeing have spoken about wanting to have no more than ten top-tier lessors on their orderbooks in the future. Lessors outside this new ring-fence will be forced to focus on trading and SLB channels in the future. This trend suggests continued or even increased competition for SLBs, which will be positive for airlines seeking to use this channel to finance new aircraft. Lessors will find ways to differentiate and capture market share.

Ireland to continue as the global leasing hub

Over the past fifty years, Ireland's rise to become the global base for aircraft leasing and aviation finance has been remarkable – an aircraft leased from Ireland now takes off every two seconds, representing more than half of the global leasing market.

Ireland's will continue to nurture a fast-growing, internationally oriented aviation leasing industry with its rich aviation heritage, skilled talent pool, comprehensive double tax treaty network, low corporate tax environment, pro-enterprise policies, stable political and legal system, and ideal strategic location (politically and culturally bridging the EU and US).

That said, Ireland will undoubtedly face strong competition from up-and-coming locations looking to build new, regional leasing hubs, as well as the other traditional leasing stalwarts like the US, Singapore and Hong Kong.



Dublin looks set to remain the global leasing hub

Rest of world leasing landscape

Asian-backed lessors grew exponentially in the 2010s to become dominant players. Majority-Chinese-backed lessors had built a one-third share of the leasing industry (by CMV) by early 2025 and six of the top 15 lessors are Chinese-controlled.

We expect that the next decade is likely to see a partial dilution of this trend. Signs are already apparent of a strategic shift, with some Chinese-owned lessors re-calibrating portfolios to focus on serving China interests – selling their global leased assets, while buying assets on lease to Chinese airlines. We expect this trend to continue. At the same time, we believe the recent trend of global lessors reducing their exposure to China as a major placement market will also endure, as they sell down China exposure to Chinese-owned lessors.

By 2034, we predict that about 20% of the global leased fleet will be in Chinese hands, down from 30% in early 2025, and some Chinese lessors will have exited the industry through platform sales/transfers.

At the same time, the next decade is likely to see an increased presence from Middle East and Indian lessors and investors, a trend already evident with the 2022 launch of Saudi Arabia's AviLease, the growth of Dubai's DAE (which recently purchased NAC) and India's promotion of GIFT City, Gujarat as a new hub for leasing.



Differentiation is the future for leasing. We've worked extremely hard to differentiate Genesis and are continually evolving our product offerings for our customers.

Being a specialist leader within our industry requires deeper skillsets, innovation and relationships. We offer more capability than most – through investment in the airline space, building an integrated component trading business, converting freighters, leasing engines and offering bespoke aircraft lease solutions. This foundation will set Genesis apart from its peers in years to come.

Peter O'Byrne
CCO Genesis

16%

Lessors had 2,124 Airbus and Boeing aircraft on order at the start of 2025, which represents 16% of the OEM backlog

\$500 billion

Lessors look set to finance half a trillion dollars of new aircraft assets in the decade to 2034





eight SUSTAINABILITY

KEY TAKEAWAYS

Achieving net zero by 2050 is the ambition of our time

SAF remains the greatest lever to reduce emissions, but greater investment is required to deliver on SAF ambition

We are still early in the multi-decade journey to transform aviation to a low carbon sector

Aviation has made enormous progress – relative fuelburn is down 80% since the 1950s

It is estimated that this transition will cost \$4.7 trillion by 2050

Much done, much left to do

If we are to limit global warming to 1.5C and achieve the goals of the Paris Agreement on climate change, all sectors of the economy will need to decarbonise and reach net zero emissions by 2050. Although aviation is a relatively small contributor to overall emissions (2.1% of global CO₂ emissions), the industry is growing and visible.

Aviation has made a strong start. It is one of the only global sectors to have come together to make an industry commitment to net zero by 2050 – a promise made by airlines, OEMs, lessors and other aviation stakeholders.

Investment in aviation technology and airline productivity has seen emissions per seat fall by 80% over the past 70 years. CO₂ emissions growth has been decoupled from air traffic growth. Between 1990 and 2023, passenger traffic grew at 4% CAGR, creating 4x growth, yet over the same period, aviation's share of global emissions stayed constant at a little over 2%, driven by fuel efficiency improvements of 2.2% CAGR.

4.0% CAGR

Passenger traffic
1990-2023

2.2% CAGR

Fuel efficiency improvement
1990-2023

~2% constant

Air transport share of emissions

Source: Airbus GMF

This remarkable achievement has been driven by improvements in aircraft and propulsion design as well as optimised airline operations to increase utilisation, lower operating costs, grow capacity and achieve scale efficiencies. Airlines and lessors are investing in a cleaner future with orders for 15,000 new technology aircraft due to enter the fleet over the next decade.

But this is a multi-decade transition. We should remember that coal is still the source for 29% of world power. The transition to net zero is expected to cost \$4.7 trillion, of which \$1.6 trillion will be required for new SAF capacity, particularly refineries. Although an enormous number, that \$1.6 trillion represents just 5% of the expected total oil and gas refinery investment over the same period.

Emissions are likely to increase before they get better as SAF availability lags and fuel-efficient new gen aircraft are delivered more slowly than expected. The consultancy firm Bain & Company estimates that the airline industry will see a net 3.7% increase in its global CO₂ emissions in 2030 versus 2019 levels.



Finnair uses SAF produced by Neste in Finland made from bio-based wastes and residues

Image courtesy of Finnair/Neste

SAF adoption will steadily increase

SAF production in 2024 doubled from 2023 levels, but the pace of production will need to increase substantially, with investment required from industry and governments. SAF is targeted to provide about 65% of the mitigation needed for airlines to achieve net zero carbon emissions by 2050. However, with just 1.9 million litres of SAF produced in 2024 (compared to IATA's goal of 30 billion litres by 2030), SAF still accounts for a mere 0.53% of aviation's jet fuel consumption. The scale of the challenge facing the industry is clearly immense.

50 countries now have SAF mandates, setting targets for their airlines to reach but uncertainty remains on SAF supply. In November 2024, Aircraft Leasing Ireland (ALI) announced its backing for a SAF Book & Claim system, which allows the buyer to 'book' a specific quantity of SAF to 'claim' the corresponding emission reduction. This allows the buyer to access and claim the benefits of SAF even if they cannot physically access the fuel. Providing worldwide access to SAF will increase demand and enable its scale-up.

Sustainability will impact airline costs

Busy rebuilding their balance sheets from the impact of the pandemic, and supportive of efforts to reduce their emissions, airlines are faced with sets of procedures that will undeniably have an impact on their costbase. The EU's Emissions Trading Scheme and ICAO's CORSIA are regional and global mechanisms designed to gradually reduce carbon emissions by incentivising lower emissions, promoting sustainable practices and achieving carbon neutral growth on international routes. ReFuel EU promotes the increased use of SAF by setting requirements for aviation fuel suppliers to gradually increase the share of SAF blends supplied at EU airports (2% share of SAF in EU airports from 2025 and 70% share from 2050). All together, these measures will increase their costs which will have to be reflected in higher airfares.

Transparency reporting will be simplified

Transparent environmental, social and governance (ESG) reporting is in the interest of increasing trust from stakeholders and reducing claims of greenwashing from regulators. ESG reporting will continue to be both voluntary and mandated, with thought-leader companies looking to communicate more detail of their sustainability progress, including whether an ESG goal timeline/scope has been reset.

Following concerns about the administrative burden imposed on companies by mandated sustainability reporting, the EU proposed an Omnibus Simplification Package in February 2025. Its aim is a significant simplification in sustainability finance reporting, due diligence and tax, in particular for small and medium enterprises (SMEs). The undertakings subject to reporting requirements will be reduced by 80% and the scope of application of Corporate Sustainability Reporting Directive (CSRD) for EU companies will be reduced to those with more than 1,000 employees, and either annual net turnover exceeding €50 million or a balance sheet above €25 million. We back these initiatives to reduce the reporting burden on smaller companies, while supporting the need for a culture of transparent sustainability reporting.

ESG fatigue is a real risk

A December 2024 survey by the advisory firm Teneo found that 23% of CEOs are currently ramping down their ESG programs – a sizable jump from 8% asked the same question a year earlier. That does mean that three out of four companies are staying the course, for now.

This ESG fatigue trend is also apparent in aviation. In addition to the slow SAF production ramp-up, there has been little growth in sustainability-linked loans (SLLs) by airlines and lessors – 26 were completed in 2023 and 21 in 2024 (according to Ishka) and largely by the same players.

In March 2025, IATA Director General Willie Walsh suggested that the airline industry may have to review its target of reaching net zero emissions by 2050, as progress on SAF was proving slower than planned.

The fact is that progress towards our sustainability goals will not always be linear. This is a multi-decade journey. It is beholden on aviation's leadership to stay the course, believe in a better tomorrow, and demonstrate real, defensible ESG progress to stakeholders and investors.

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We haven't seen ATC reform, we haven't seen new technology delivered on time, and we haven't seen the government policies and financial support for SAF that we were expecting. These guys are committed to net zero by 2050, but they're not doing anything to help get us there. While airlines remain committed to decarbonisation, the conditions for success are simply not in place. If others are not prepared to play their part, it will bring into question whether net zero by 2050 is possible.

Willie Walsh

Director General, IATA in an Ishka interview

Future tech promise is well into the future

Next generation aircraft technology will be core to making great leaps toward sustainable aviation. However, the harsh reality is that there are no new large-scale jet aircraft programs on the horizon. And the major OEMs are primarily focused on delivering their record backlogs and resolving supply chain issues.

With the aim of increasing fuel efficiency by at least another 20%, it will be crucial that OEMs use the time over the coming decade to make real progress on the technology blocks that will enable a new program to be launched in the mid 2030s. Airbus is evaluating its next generation single aisle (NGSA) that could reduce fuel burn by up to 30% and accommodate open-rotor engine designs, while Boeing is researching the potential of new wing technology.

ReGEN

THE CIRCULAR ECONOMY – REUSE & RECYCLE



Genesis full lifecycle approach

Through its ReGEN component trading business, Genesis has adopted a circular economy approach to aircraft lifecycle management. ReGEN is an accredited member of the Aircraft Fleet Recycling Association (AFRA) and is committed to environmentally responsible aircraft disassembly and recycling process for end-of-life aircraft extracting the maximum value from an aircraft throughout its lifetime.

When any aircraft is delivered new, it creates a sustainability deficit, as the materials sourced in production have a negative environmental impact. This includes titanium, steel, aluminium, plastics, petroleum bi-products, precious metals and other materials.

The longer the aircraft operates, the greater the payback on this original deficit – delaying when the aircraft needs to be replaced by a new model, which then will create its own, new environmental deficit.

At the end of the airframe's useful life, after ~25 years of flying (or longer if it is converted to freighter), ReGEN maximises the value of the aircraft recycling metals and other materials and harvesting the in-demand used serviceable material (USM) plus the engines and landing gears. These are then overhauled or repaired and recertified before entering the global the spares pool supporting Genesis customers across the globe. The life remaining on these high-value components such as engines, landing gears and APU's continue to support the in-service fleet, creating additional revenue streams and supporting the circular economy.



nine INFRASTRUCTURE

KEY TAKEAWAYS

With aviation poised to grow by over 40% in a decade, all the value chain needs to scale up

Airport, MRO and ATM capacity will all need sizable investments and skilled labour to grow

Many, exciting new airport developments are in progress, especially across major Asian cities

MRO capacity today is constrained by labour lost to the pandemic, peaks in engine maintenance needs and a fleet that is flying on for longer

Europe and the US need to progress stalled endeavours to streamline ATM landscapes

Fundamentally, if the global fleet is going to be able to grow 3.5% per year, or by 41% over the decade, all of the aviation ecosystem will need to expand at a similar pace. Otherwise, clearly bottlenecks will quickly emerge. That means, the industry will need to see at least one third more global airport, MRO and airspace capacity coming onstream.

Airports

With most traffic growth over the next decade expected to take place in emerging markets, new airports, terminals and runways will need to come on stream at a brisk pace across Asia Pacific, the Middle East and Latin America. In 2023, 117 airport construction projects broke ground, according to GlobalData, with a combined value of \$51 billion. This reflects healthy growth on the 71 projects that broke ground in 2022.

Some of the projects currently in construction and due to come online over the coming years include:

- Hong Kong – Three Runway System (120 million passengers, 10 million tonnes cargo) due to begin operations in 2025
- Chongqing Jiangbei Airport Terminal 3 and fourth runway (80 million passengers, 1.2 million tonnes cargo) due 2025
- Long Thanh Airport, Ho Chi Minh City (25 million passengers in first phase, later 100 million) due in 2026



Image courtesy of HKIA

- New Manila International Airport (35 million passenger capacity initially, 100 million later) due in 2027
- Solidarity Transport Hub, or 40km from Warsaw (initially 40 million passenger capacity) due by 2027
- Casablanca Mohammed V Airport, Morocco new terminal (20 million capacity) set to open by 2029
- JFK, New York has multiple reconstruction projects with a budget of \$19 billion: an all-new international Terminal 1 (2026), expanded T4 (for Delta) and all-new T6 (for jetBlue, Lufthansa and Aer Lingus, 2026 delivery).

However, in more developed countries, significant airport expansion looks like it will be constrained by cost, planning and environmental obstacles. This will particularly be an issue in Europe, where new airport capacity is in short supply. There have only been two new runways built in the UK in the last seventy years (at Manchester and London City). However, Dublin Airport saw its new northern runway come onstream in 2022 at a reasonable cost of €320 million.

We can expect the low level of growth in airport (and airspace) capacity in developed markets will push the industry towards larger aircraft on relatively short missions. That will see the larger gauge A321neo and 737 MAX 9/10 becoming the narrowbody variants of choice.

The modern-day airport will have to embrace cutting-edge technology to enhance the travel experience. Advancements in facial recognition, biometric scanning, and AI-driven security checks will soon become commonplace within the airport setting, making the journey from check-in to boarding gate smoother and reducing passenger queuing time by an estimated 30-40%. This greater efficiency of passenger throughput means that both airport operators and passengers can benefit. AI provides the opportunity for airports to re-think the way their terminals operate and to entirely redesign the layout of airports, as innovations are introduced that reduce, if not eradicate the need for stopping points along the passenger's airport journey.

Airport infrastructure will also have to keep pace with preparing for future aircraft developments. Hybrid regional aircraft are likely to have entered service by the end of this decade. Powered by both batteries and fuel, if they are to be successful, they will need electric charging infrastructure – both fixed and mobile – in place to enable fast aircraft turnarounds. This has significant implications for power supply and storage in the airport environments. Forward-looking airports will also need to start thinking about the future availability of hydrogen-powered aircraft, and the complex handling arrangements involved with hydrogen.

MRO

Airlines learned how to cope with an unprecedented drop in passenger demand during the pandemic. Now, after three years of steady recovery, they are grappling with the opposite challenge: too few new aircraft to support growing demand. Many airlines are therefore delaying aircraft retirements as a stopgap measure, and this action is driving increased demand for MRO services. Simultaneously, the reduction in retirements is limiting feedstock for used serviceable materials (USM). MRO productivity is also heavily constrained by the availability of new and used parts.

Major new MRO projects that have come online in the past few years highlight an ongoing slow shift in location towards emerging markets for airframe MROs – closer to customers and available talent. These include:

- Emirates is investing \$950 million to build a new 1 million square metre MRO at Dubai World Central (DWC), the largest of its kind by any airline and purpose-built to support Emirates' fleet into the 2040s
- Lufthansa Technik is to build a new plant in northern Portugal that will focus on MRO for individual components of aircraft and engines
- Air India has started construction of a mega MRO facility on a 35-acre land parcel in Bengaluru, that is to become the key hub for maintenance of the group's airlines as they modernise their fleets.

The magnitude of labour cost increases for MROs has become unsettling, jumping by 7.3% on average worldwide in 2023, with expectations of a further 5.8% rise for 2024. A recent OliverWyman survey found cost management and labour shortages to be the top two aviation MRO market disruptors, followed by inflation and/or economic slowdown.

Looking forward, airlines will not have enough aircraft to sustain their desired growth plans for reasons discussed earlier. Airlines will keep current aircraft in service longer to fill the gap resulting in extended aircraft life and additional maintenance to engines and airframes that may not have been planned for in a more balanced supply-demand environment.

Continuing low aircraft retirement rates coupled with new technology engine reliability will drive expansion of global MRO. We can expect that new airframe MRO capacity to be added in locations with lower costs of labour, given the high labour component in airframe maintenance. Engine MRO capacity may not follow the same trend due to the much lower labour component compared to parts in engine maintenance.

MRO AirAsia digital engineering

Asia Digital Engineering (ADE) is poised to become a key player in the ASEAN regional MRO sector.

A wholly-owned subsidiary of Capital A Berhad, ADE was established in 2020 and has quickly scaled its operations. In September 2024, ADE launched its flagship L-shaped hangar within KLIA's Aeropolis development, offering 14 lines of narrowbody maintenance, making it the largest aircraft maintenance hangar of its kind in Malaysia. The facility spans 20 acres and significantly expands ADE's capabilities.

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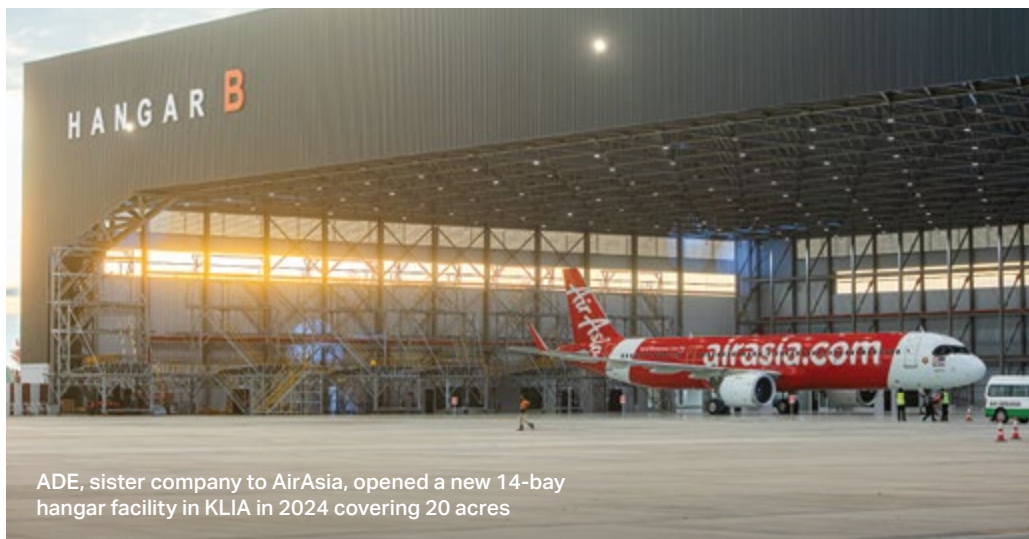
Pre-COVID-19, AirAsia outsourced 95% of our MRO needs. We had a true low-cost carrier approach – outsourcing was always the answer. COVID-19 forced us to rethink that philosophy entirely and bring MRO in-house. In fact, we used the pandemic as a chance to redesign the organisation, separating the airline from the ancillary businesses under Capital A, including ADE.

At AirAsia, we previously returned aircraft to lessors at year 12. Now, we fly them until year 18 – and that requires a lot more MRO support. An additional six years means three more C-checks, plus the need for service life extension work.

Malaysia offers competitive labour costs and the space to grow at our home base. We had the advantage of building a clean-sheet MRO without any legacy cost burdens.

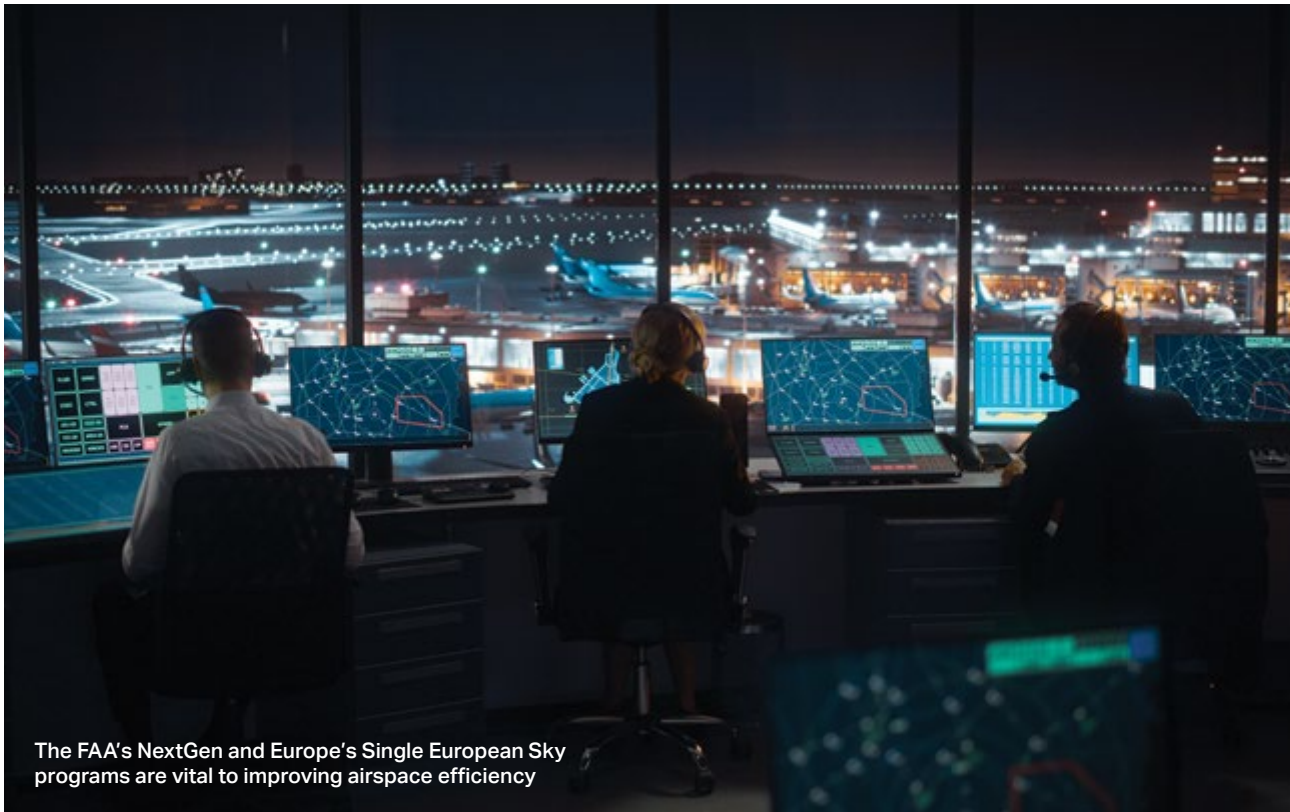
It's a huge advantage to have our maintenance base located at our hub – no need for positioning flights, and no pressure to build MRO capacity in more challenging, expensive locations. Securing this kind of real estate would not have been possible in Singapore, Bangkok, Manila, or Hong Kong.

Mahesh Kumar
CEO, Asia Digital Engineering (ADE)



ADE, sister company to AirAsia, opened a new 14-bay hangar facility in KLIA in 2024 covering 20 acres

Image courtesy of ADE



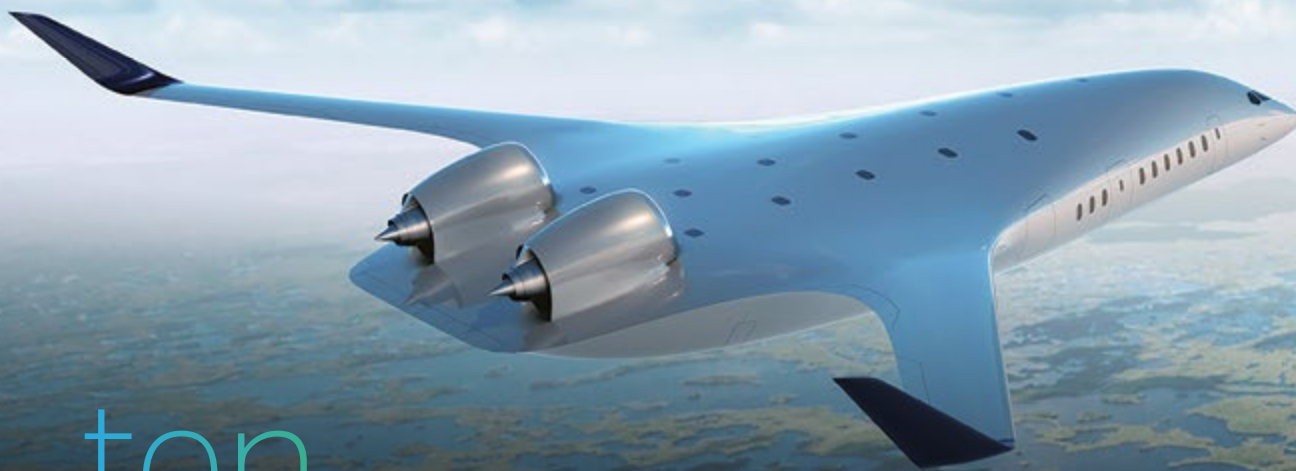
The FAA's NextGen and Europe's Single European Sky programs are vital to improving airspace efficiency

Air traffic management

The infrastructure area that can have the biggest impact on aircraft fuel efficiency is the air traffic management (ATM) system. The route an aircraft takes, the height it flies, and the weather it flies through, all affect the amount of fuel it burns, and therefore the CO₂ it emits. These factors are managed by air navigation service providers (ANSPs), which provide air traffic control services.

In many regions of the world, mid-20th Century technology is still being used to direct air traffic. This requires aircraft to zigzag between ground-based radar posts throughout their journey, however, this is undergoing rapid change. By using new satellite-based navigational technologies and 'performance-based navigation' procedures, aircraft can follow optimised, more direct routes with greater accuracy and efficiency. Cutting out unnecessary travel time saves fuel, reduces CO₂ emissions and enables aircraft to use the extra airspace to accommodate increasing air traffic, reducing congestion and delays.

Both the US FAA through the NextGen program and Europe through the Single European Sky (SES) are working on modernising air traffic management systems to handle increasing traffic, reduce delays, and make airspace use more efficient. SES was launched in 2004 with the aim of reducing emissions by 10%, in addition to achieving safety improvement and cost reduction and remains largely unfilled today. These initiatives require international cooperation; Europe's airspace is divided into 27 states, each with its own air traffic control service and 45 different ANSPs. While the operations are very safe, there is duplication of effort and inefficiencies resulting in delays and increased flight time. Progress will remain slow on optimising the ATM system.



ten INNOVATION

Image courtesy of JetZero

KEY TAKEAWAYS

Like other industries, aviation as we know it will be transformed by technology in the next decade

2023 was the year that generative AI burst into our lives; ChatGPT had 100 million users within 2 months

There will have far-reaching consequences for the speed of decision-making – those players that embrace digital transformation, data analytics, and AI/ML will be tomorrow's leaders

With no new aircraft programs on the horizon and orderbooks full, OEMs will spend the next decade researching, developing and maturing new technologies to enable program launches in the mid-2030s.

The innovation opportunity at lessors

If it can be measured, it will be optimised. By 2034, we can expect lessor pricing and fleet management to be largely automated, as out of the box software as a service (SAAS) solutions decline in popularity due to the following issues.

Cloud or data lake-based AI-enabled solutions

Lessors will embrace digital transformation, cloud-based or private data lake-based solutions that reduces reliance on legacy infrastructure, do away with data silo-ing, and introduces modern data analytics, machine learning (ML) and artificial intelligence (AI) to augment decision-making.

Digital records

The immense efficiency opportunity by digitising electronic records continues to remain unfulfilled and will hopefully be tackled. It would reduce cost, enhance reliability, and enable faster aircraft transition, as well as be more sustainable through the elimination of paper waste.

Maintenance fly-forwards

The workload at lessor technical teams to forecast the timing and size of future maintenance events is one that is ripe to be streamlined by generative (Gen) AI, allowing airlines and lessors to access critical maintenance asset records faster.

Pricing

AI is already improving price-setting models and informing smarter contract negotiations. It can sift historical data to discern the impacts of changes in industry conditions (swings in supply and demand), customer preferences, and perceived value of a product.

Risk

AI and ML tools will be increasingly used by lessor risk management teams for quicker and more efficient credit, investment and business-related decision making. AI/ML solutions can be used for model risk management and stress testing. This is a labour-intensive work at lessors – where counterparties span jurisdictions, languages and time zones.

Legal

AI and Gen AI have the potential to transform the legal profession. They are already assisting with contract analysis, due diligence, litigation, regulatory compliance, drafting, summarisation, document analysis, linked legal citations, enhancing internal knowledge databases and predicting case outcomes. This will only accelerate over the next decade.

Sustainability reporting

Companies face a new and dynamic sustainability reporting landscape. Regulatory frameworks (like CSRD) coexist with voluntary frameworks (like Global Reporting Initiative and Task Force on Climate-related Financial Disclosures), making it difficult to stay informed and compliant. GenAI can help companies understand the compliance requirements and generate company-specific insights.

ReGEN

Accelerating pricing for USM

Genesis' ReGEN unit is already using an optical character recognition (OCR) AI tool that is able to identify and recognise the thousands of part numbers on an aircraft specification sheet (even when they are handwritten).

Within seconds, these can be cross-referenced with ReGEN's pricing model and a total asset value can be proposed to a client. This work might have taken days previously. Solutions like these have the power to transform the time and effort involved in pricing an aircraft for its component value.



Relationships more important than ever

In the age of AI and big data, a little counter-intuitively, personal relationships and trust will become more important than ever.

Lessors are not always going to have the lowest cost of capital or a solution to each airline's ask. This means that having clear points of differentiation that airlines value is fundamental for the future positioning of leading lessors.

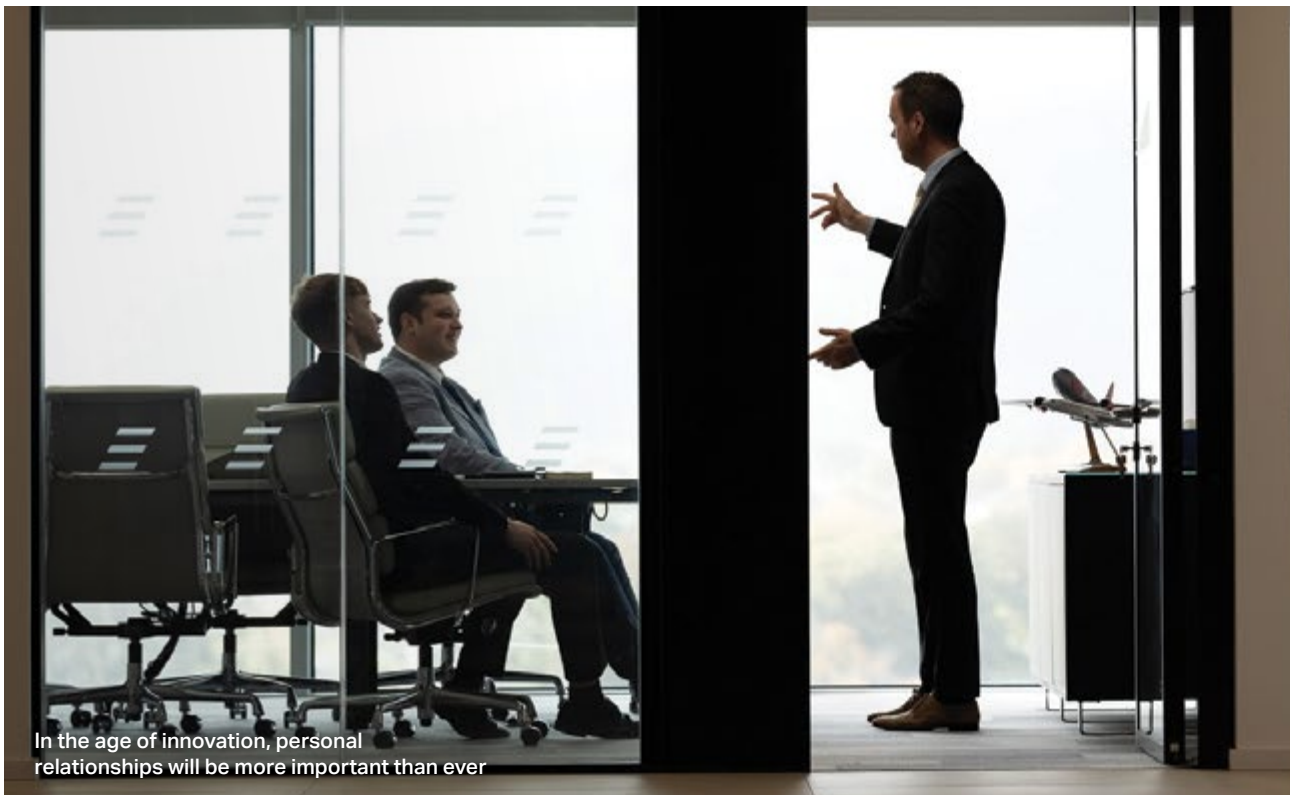
Great relationships are a key differentiator. Those lessors that can be a resource for airlines, can listen to their needs, have 'been there' for airlines through prior crises, and have a long-term view of mutual success will be the lessors best positioned for success. Using AI to streamline administrative tasks will liberate teams and free up time to develop these key relationships.

For employees, the arrival of AI brings opportunity, as well as anxiety. Skilling team members for an AI-led world will be vital for employers across aviation. AI will be an adoptive challenge and to ensure no one is left behind, specific and focused training and education programs will be necessary.

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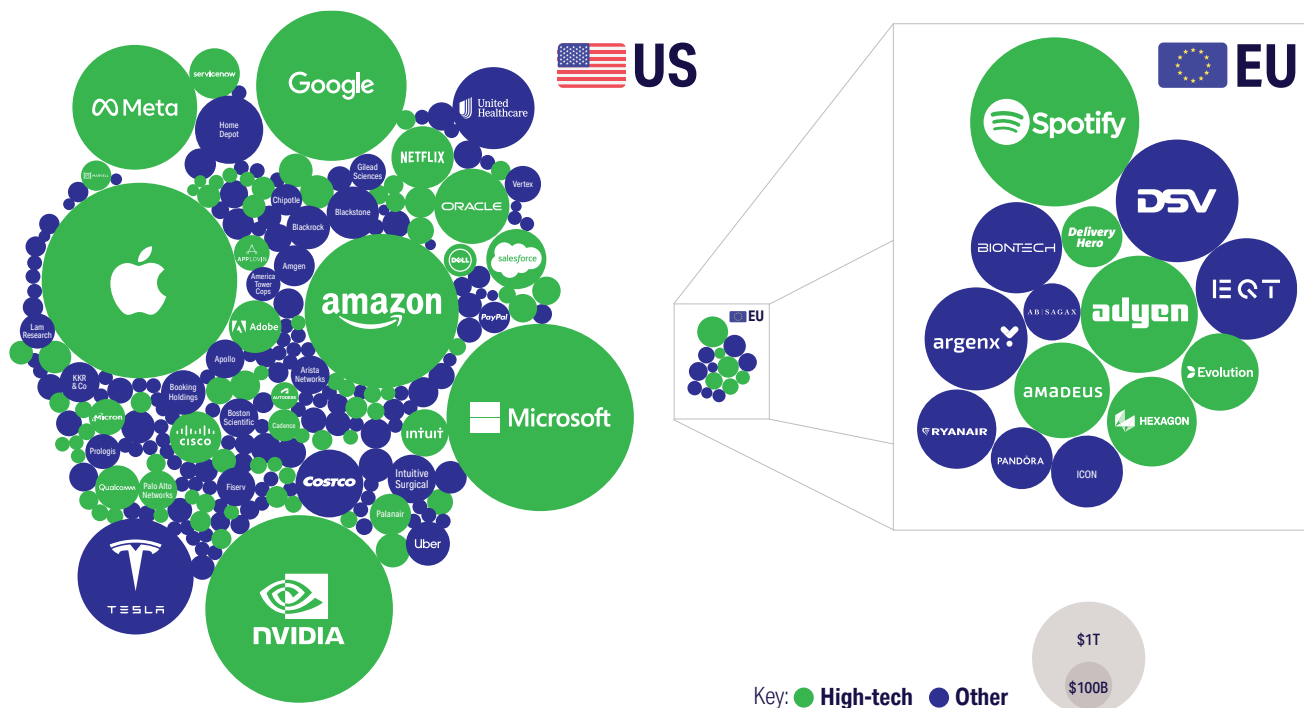
Genesis is well positioned to maximise the potential of current and new generation aircraft investments. We strive to match the right debt structure to the asset profile, creating an optimal balance between pricing and flexibility for aircraft investments across the lifecycle.

Adam Smyth
CFO, Genesis



In the age of innovation, personal relationships will be more important than ever

Public from-scratch US and EU companies less than 50 years old with \$10 billion+ market cap



Bubble area proportional to market cap. Companies grouped by HQ at time of IPO. Market cap in 2023 USD, Assessed at 26 November 2024. Green bubble indicates a company in a "tech" industry. Blue bubble indicates all other industries.

Europe's innovation challenge

Fifteen years ago, the EU and US economies were neck and neck in size. Today, the US economy is 50% larger. The US's GDP in 2023 was \$25.5 trillion while the EU's was \$16.6 trillion. But back in 2008, they were nearly equal. What happened in those fifteen years?

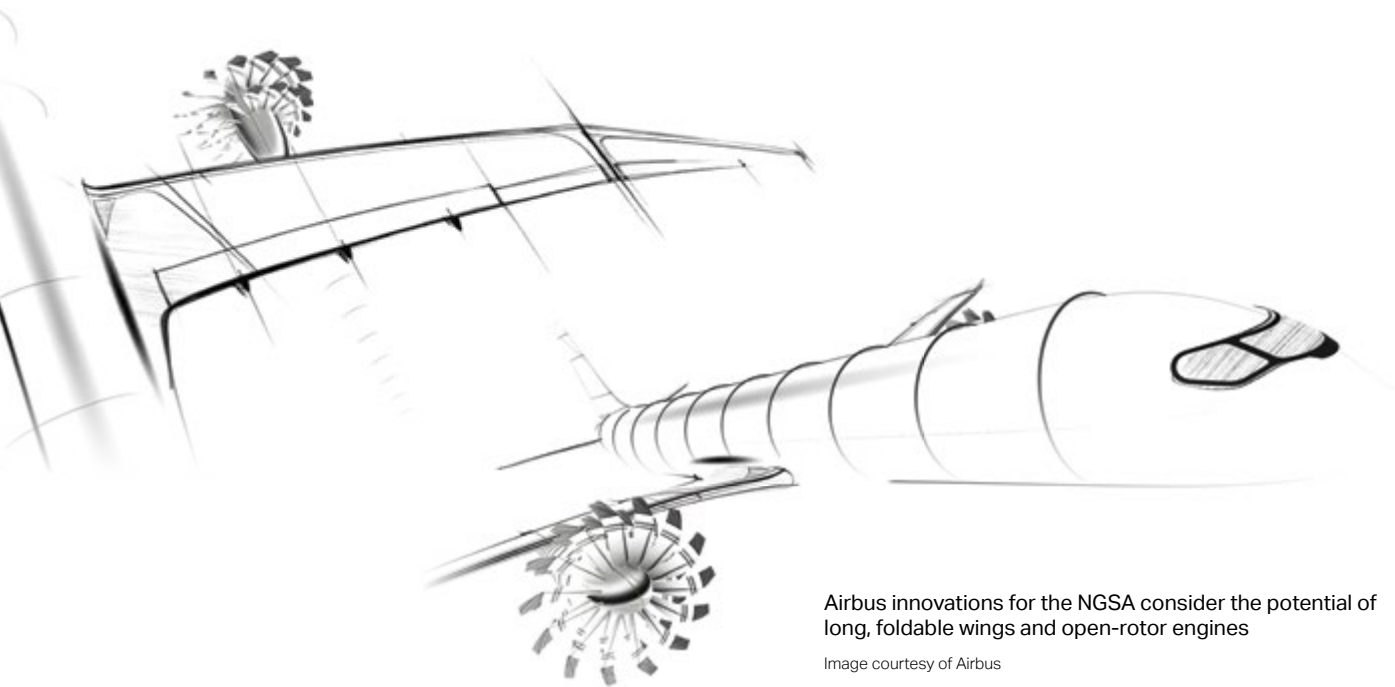
America has produced six trillion-dollar companies, and nine of the 10 most valuable companies in the world. Europe has no company in the top ten most valuable. Not only is the US leading on creating the right environment to grow new companies, it is also where many European entrepreneurs are moving to secure venture capital and seed funding for their new business ideas.

In Europe, few new companies are rising up to disrupt existing industries or develop new growth engines. In fact, there is no EU company with a market capitalisation over €100 billion that was set up from scratch in the last fifty years, while all six US companies with a valuation above €1 trillion have been created in this period.

As EU companies are specialised in mature technologies where the potential for breakthroughs is limited, they spend less on research and innovation (R&I) – €270 billion less than their US counterparts in 2021. The top three investors in R&I in Europe have been automotive companies for the past twenty years. It was the same in the US in the early 2000s, with autos and pharma leading, but now the top three are all tech.

Europe must profoundly refocus its collective efforts on closing the innovation gap with the US and China, especially in advanced technologies.

In September 2024, the EU Commission published the Draghi Report, written by the respected former Head of the European Central Bank, Mario Draghi. This deep-dive into European competitiveness delivered a set of recommendations and proposals about the future of the EU's competitiveness. The report has pressed a much-needed sense of urgency for the EU. The sector-by-sector, competitiveness-first approach could mark a watershed in the theory and practice of industrial strategy. The report proposes focusing on four objectives: boosting innovation, particularly in high technology; adopting a new industrial strategy; combining multiple policies (tax, trade, and foreign policy); and reforming competition law to facilitate mergers of European corporations.



Airbus innovations for the NGSA consider the potential of long, foldable wings and open-rotor engines

Image courtesy of Airbus

A decade of technology proving ahead

Almost 90 years later, we are (still) living in a world that was created by the Boeing B-47 Stratojet in 1947, which advanced a series of design innovations adopted by the civil 707 when it first flew in 1957. Almost every sub-sonic jetliner developed over the subsequent nine decades has largely retained the same overall tube and swept-wing shape.

With no new aircraft programs on the horizon and their orderbooks full until the early 2030s, OEMs will spend the next decade predominantly researching, developing and maturing new technologies – including new wing designs, hybridisation and understanding the impact of innovations such as open-rotor powerplants. For the valiant start-up OEMs, it will be one for proving their design concepts, raising finance and imagining industrialisation.



Boeing has shelved development of its X-66 TTBW concept and will focus on 'thin wing' designs

Image courtesy of Boeing/NASA

In April 2025, Boeing announced it would shelve plans to develop the X-66 Sustainable Flight Demonstrator. The company said it would instead redeploy engineers to assist the 777-9 and 737 MAX 7/10 programs, which are the more immediate priority. The X-66 Transonic Truss-Braced Wing (TTBW) demonstrator had been due to fly in 2028 using a modified MD90 airframe and Pratt & Whitney's geared turbofan. It was slated to serve as a future test bed for CFM's RISE open rotor design. NASA had committed to invest \$425 million and Boeing plus partners \$725 million. The X-66 was the flagship of NASA's push to achieve net zero aviation emissions by 2050 under the agency's Sustainable Flight Demonstrator project.

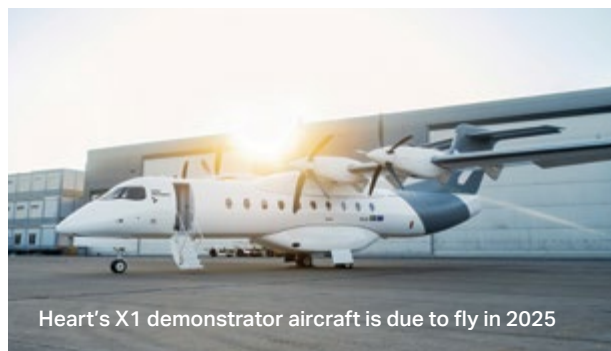
Instead, Boeing will focus on 'thin-wing' technology and continue to assess the performance benefits of the truss-based configuration. "We've done extensive additional wind tunnel testing that confirmed the aerodynamic benefits of the thin wing" according to Chief Technology Officer, Todd Citron.

In March 2025, Airbus outlined a series of technology bricks that would enable the development of a next-generation single aisle aircraft (NGSA) which could enter service in the second half of the 2030s. These would deliver a target 20-30% increase in fuel efficiency compared with today's latest aircraft. Potential applications being explored include long, foldable wings allowing for significant aerodynamic gains (through its Wing of Tomorrow research and technology program); more efficient engines including disruptive open fan engine designs; next generation batteries to enable hybrid architectures with electricity increasingly used to support propulsive and non-propulsive functions; as well as lightweight materials and integrated systems for a connected aircraft. Airbus plans to flight test CFM's RISE engine on its A380 flight test aircraft by the end of the decade.



ZEROe fully electric hydrogen-powered four pod aircraft

Image courtesy of Airbus



Heart's X1 demonstrator aircraft is due to fly in 2025

Image courtesy of Heart Aerospace



ZeroAvia is focusing on zero emissions electric/hydrogen engines

Image courtesy of ZeroAvia



Embraer's Energia research program from 19-50 seats

Image courtesy of Embraer

At the same time, Airbus revised its roadmap to mature the technologies associated with hydrogen-powered flight. It postponed its ZEROe program by 5-10 years, citing slow development of key hydrogen technology and infrastructure. But it did showcase a hydrogen regional aircraft powered by four, 2-megawatt electric propulsion engines, each driven by a fuel cell system that converts hydrogen and oxygen into electrical energy. At the Airbus Summit in March 2025, Head of Future Programmes Bruno Fichet said: "Hydrogen is at the heart of our commitment to decarbonise aviation. While we've adjusted our roadmap, our dedication to hydrogen-powered flight is unwavering. Just as we saw in the automotive sector, fully electric aircraft powered by hydrogen fuel cells have the potential in the longer term to revolutionise air transport for the better."

Building on the efficiency of the E2, Embraer is exploring a range of sustainable concepts to carry between 19 and 50 passengers through the Energia project. This venture is considering a number of energy sources including hybrid-electric, hydrogen fuel cell and hydrogen gas turbine/dual fuel; propulsion architectures; and airframe layouts to reduce carbon emissions, a key step in its goal to be net carbon neutral by 2050.

We may also need to look beyond today's leading aerospace OEMs to see fundamental change in design and technology.

Swedish start-up Heart Aerospace, with its 30-seat hybrid-electric ES-30, is the only new technology airliner program with an EIS targeted within the coming decade. The ES-30 promises zero CO₂ emissions operations on flights up to 200km, before switching to JetA1 or SAF for distances of up to 400km.

Heart intends to conduct the first fully electric, experimental flight of its full-scale X1 demonstrator aircraft during 2025 in Plattsburgh, New York. To date, the company has raised \$145 million for its plans to reshape regional aviation. In May 2025, Heart announced it would relocate its corporate headquarters from Gothenburg, Sweden to Los Angeles, a strategic move aimed at bolstering the company's product development in the United States.

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The 30 seat ES-30 is a first step in regenerating regional air travel with hybrid-electric technology, and its performance will only improve as battery advancements accelerate. We are seeing a massive surge in aviation battery patents which supports the rapid progress in energy density, charging speed, and thermal management. As these technologies scale, we see opportunities for even larger hybrid-electric aircraft, unlocking a more sustainable and economically viable future for aviation.

Simon Newitt
President & Chief Commercial Officer
at Heart Aerospace



Deutsche Aircraft D328eco

Image courtesy of Deutsche Aircraft



MAEVE Jet Hybrid-Electric Regional Airliner concept

Image courtesy of Maeve

Dutch start-up MAEVE is progressing a 50-95 seat hybrid-electric regional aircraft concept, with support from Japan's MHIRJ, which acquired Bombardier's CRJ Series and supports an in-service fleet of 1,300 aircraft.

The MAEVE Jet proposes 40% lower fuel consumption than current regional jets, US Scope-Clause compliant design weights and Mach 0.75 speed through the use of a swirl recovery system coupled with an advanced aerodynamics rotor. Its latest design proposes a rear fuselage-mounted powerplant with unducted rotors. MAEVE is supported by private investors, the Government of the Netherlands and the European Investment Council (EIC).

ZeroAvia is focusing not on new airframe designs but on leading the transition to zero emissions hydrogen-electric propulsion. It is currently flight testing the 600kW electric propulsion system, a vital step as part of its wider ZA600 hydrogen-electric powertrain, designed for up to 20-seat commercial aircraft.

In April 2025, ZeroAvia's 600kW electric propulsion system was selected for the 9-seat Jetcruzer 500E, a 6-seat hydrogen-electric aircraft with an entry into service (EIS) intended for 2028.



Boom's vision for the future is Overture, a Mach 1.7 supersonic airliner that would carry 64 to 80 passengers

Image courtesy of Boom Technology

Beyond the regional aircraft space, the progress of blended wing body (BWB) concepts by two start-up OEMs will be followed with interest. Long Beach-based JetZero was founded by the aviation pioneers who invented the original BWB and has secured government funding worth \$235 million from the US Air Force to develop a scale-model with Northrop Grumman and scaled composites due to fly in 2027, powered by PW2040 engines.

JetZero's Z4 BWB design integrates the wings and fuselage into a single shape, significantly reducing aerodynamic drag, offering a targeted 50% fuelburn and emissions reduction compared to the current tube-and-wing design. In April 2025, United Ventures announced an equity investment in JetZero which secured a pathway to order up to 100 aircraft and an option for an additional 100, potentially challenging the Airbus and Boeing duopoly. Alaska Air Group is also an investor in JetZero. Excluding this latest investment, JetZero has raised \$300 million to date, according to The Air Current.

San Diego-based Natilus is developing two BWB concepts: the Kona, a regional cargo aircraft that can carry a payload of 3.8 metric tons over a range of 900nm; and the Horizon passenger aircraft, which carries up to 200 passengers over a range of 3,500nm and promises 50% lower operating costs than today's technology. Natilus is already flying a scale-model of its Kona freighter concept.

A very different vision for the future of aerospace comes from Denver-based start-up Boom Technology. Boom is developing Overture, a supersonic airliner designed to carry 64 to 80 passengers over 4,250 nautical miles, while cruising at Mach 1.7. One of the challenges to overcome is the lack of a suitable powerplant, leading Boom to develop Symphony



Natilus' Horizon BWB concept

Image courtesy of Natilus



United has invested in JetZero and secured a pathway to ordering 100 Z4 aircraft

Image courtesy of JetZero

with partners, its own purpose-built turbofan engine. In January 2025, Boom flew its XB-1 one-third scale demonstrator at supersonic speeds, the first privately developed aircraft to do so. To date, Boom has raised \$700 million, including a strategic investment from Saudi Arabia's NEOM Fund.

Building, certifying and supporting new aircraft for adoption by a global operator base is immensely challenging. It requires technical validation and certification, industrial manufacturing infrastructure, and a global in-service support network. So, few new OEMs can realistically be expected to break into the decades-long industry structure of Airbus and Boeing, followed by Embraer, and more recently COMAC.

1947

Entry into service of the Boeing B-47 Stratojet, which introduced technologies that were commercialised on the 707 which first flew in 1957, with a layout that is still recognisable on today's aircraft designs, 90 years later

50%

JetZero's Z4 BWB aircraft design integrates the wings and fuselage into a single shape, significantly reducing aerodynamic drag, offering a targeted 50% fuelburn and emissions reduction

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Airlines must grow in order to support passenger demand and deliver shareholder value, but their requirements for a mid-market airplane have largely gone unmet by the incumbent OEMs. JetZero's blended wing airplane delivers this solution by innovating the shape of the airplane. With a blended wing, all surface areas produce lift, resulting in aerodynamic efficiency and weight benefits that drive up to 50% less fuel requirements for flight. It will have a 5,000 nm range, with 200-290 seats, perfectly designed to meet the long-haul/international market, as well as the dense short-haul domestic markets. Airline growth benefits everyone, from more competition, lower fuel consumption and its related reduced emissions, and local and regional economies. The Z4 is a growth vector and will have no competition that matches its promise.

Dan da Silva
COO JetZero

Futurescope

Trends to watch in the decade to come

Crossover to a 50% new gen narrowbody fleet will not happen before 2029

Nine years after the first delivery of the A320neo to Lufthansa in January 2016, new generation narrowbodies still only account for 27% of the fleet. Slow OEM production ramp-up will see the 50% crossover take until 2029, years later than planned.

The A321neo will be the aircraft of the decade

The A321neo (standard, LR, XLR) now commands 72% of Airbus' A320neo family backlog. That could see it capture 44% of all narrowbody deliveries by 2034 - more than two of every five narrowbodies. Similarly, Boeing ecosystem airlines are keenly awaiting the revenue potential and lower cost offered by the rival 737 MAX 10.

India, the Middle East and Turkey will be centres of gravity

With government vision to embrace aviation, enormous airport projects will come on-stream over the next decade – including Riyadh with 120 million pax capacity, Dubai World Central with 150 million pax capacity and Istanbul with 200 million pax capacity when all phases are completed. This ambition will be matched by the local airlines – IndiGo and Air India have orders for over 1,400 aircraft, Turkish and AJet for 350 aircraft, Emirates for 300 aircraft and Saudia, flyadeal, flynas and Riyadh Air for over 450 aircraft.

Further airline and lessor consolidation is inevitable


Given the continued rise in operating costs, it will be increasingly difficult for smaller players without defensible market positions to survive alone. Larger lessors and airlines will acquire smaller players if they are unable to access OEM orderbooks or grow their fleets organically.

Chinese carriers will continue to dominate long-haul traffic ex-Asia

Chinese carriers have increased their market share on European routes from 56% in 2019 to 82% in 2024, aided by their ability to overfly Russian airspace. With the vast majority of ticket points-of-sale on Chinese routes being within China, its carriers will continue to dominate this market. At the same time, Middle East and Turkish sixth freedom carriers will continue to expand their dominant presence on key markets between Europe and South Asia, Southeast Asia and Australia.

LCCs to continue to grow relentlessly

The LCC march will continue and Ryanair will lead the charge, leveraging its unit cost leadership to aim to grow to 800 aircraft and 300 million guests over the next 10 years, aided by its digital hub, Ryanair Labs in Poland. Wizz Air will look to mirror this growth trajectory in Central and Eastern Europe as well as the Middle East. Other LCC leaders will be retain market leadership in South East Asia, India and South America.



The CPA/ACMI business model will go global

Already well established in Europe and the US, capacity purchase/ACMI has become a standard long-term solution to address peak season demand needs and solve for missing capacity or specific aircraft type needs. In the next decade, we predict the model will expand into new markets around the world – recent new markets for ACMI entry include India, Malaysia, Brazil, Indonesia, Australia and Central Asia.

No all-new 150-250 seater aircraft in-service before the late 2030s

Airlines and lessors will have to rely on today's choice of aircraft and engines for the foreseeable future, but the mix will become increasingly new generation. To achieve the step-change in fuel efficiency and emissions the industry needs will require OEMs to make the most of the next decade - advancing research in aerodynamics, materials, technologies and fuel sources, all crucial to any new program launch.

The world's economic centre will continue to shift eastwards

The seismic geopolitical events of April 2025 are still unfolding. While the long-term impact of trade tariffs and remains to be seen, it seems already apparent that the uncertainty they raise and the era of protectionism they threaten will see the shift in the world's centre of gravity towards the Global East and Global South continue.



About Genesis

Genesis' was established in 2014 by global financial service firm Barings. It is a full-service narrowbody aircraft lessor based in Dublin with a portfolio of 70 owned, managed and committed Airbus and Boeing aircraft on lease to 40 customers in 30 countries worldwide.

Genesis full-service platform provides focused solutions for investor and airlines. It leverages our deep domain asset management expertise providing optimised fleet solutions to our airline customers resulting in enhanced investor returns driven by capability to manage the asset across the lifecycle. Genesis acquires aircraft through multiple channels, structuring bespoke debt solutions for the lifecycle management strategy.

Genesis is a balance sheet lessor that also provides third party asset management services.

The component trading arm of Genesis is ReGEN, a company founded in early 2023 to extend Genesis' service capabilities in the aftermarket parts space, providing in demand airframe and engines component solutions to global airlines and maintenance repair organisations.

For more information, visit

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