

Position Paper 2026/180

Reinforcing Europe's Aeronautics Leadership: Delivering a Just Transition through Sustainability, Resilience and Quality Jobs

Europe's aeronautics leadership is at risk

The European civil aeronautics industry is one of the few industrial sectors in which Europe remains a global leader. Yet this leadership cannot be taken for granted. Despite strong global demand for aircraft, the industry is struggling to deliver at the pace required. Structural weaknesses in the supply chain, skills shortages, underinvestment, and fragmented industrial coordination are constraining production capacity. The development of the next generation single-aisle aircraft (the A320 successor, with entry into service foreseen between 2035 and 2040) represents a decisive moment, setting the course for the future of Europe's aeronautics industry¹.

At the same time, the sector is undergoing a profound transformation as it seeks to achieve climate neutrality by 2050, while facing global competition and rising geopolitical tensions. In this context, the risk of a potential air traffic moderation, related either to macro-economic shocks or to a constrained availability of decarbonised energy resources, shall be properly identified, anticipated and addressed, notably in terms of its impacts on future employment and skills.

Europe's current policy framework is no longer sufficient to address these challenges. Since the adoption of EU's first [Aviation Strategy for Europe](#) in 2015, the aeronautics value chain has become more globalised, more interconnected and increasingly vulnerable to disruption. The European Commission's initiative to develop a new EU Aviation and Aeronautics Strategy is therefore both timely and necessary.

IndustriAll Europe, representing workers across the entire aeronautics value chain, considers that this Strategy must focus on strengthening the sustainability and resilience of the sector while ensuring a Just Transition for workers. This requires an ambitious industrial policy based on long-term investment, resilient value chains, strong labour rights and high-quality employment. Strengthening European production capacity and developing "Made in Europe" and local-content strategies will be essential to protect jobs, stabilise supply chains and safeguard Europe's technological and industrial leadership in the aeronautics industry².

¹ Rolls-Royce estimates for example that the jet-engine programme for the next-generation single-aisle aircraft could represent a market opportunity worth up to USD 1.6 trillion.

² See iAE position paper: https://news.industriall-europe.eu/documents/upload/2026/4/639122989754339696_%E2%80%98Made_in_Europe%E2%80%99_an_industrial_worker_perspective_-_EN.pdf

A strategic industry with a complex value chain

The European aeronautics industry is a key strategic sector - with strong links to defence and space. It produces to a large extent high-quality jobs and consists of a dense network of several thousand firms operating across the continent. While major industrial leaders - such as Airbus, Thales, Safran, Leonardo, and Rolls-Royce - play a prominent and highly visible role, the sector is structurally sustained by a far larger base of small and medium-sized enterprises (SMEs). According to estimates by the European Commission, more than 80% of companies active in the aeronautics industry fall into the SME category. These firms constitute a critical component of the aeronautics ecosystem, carrying out niche, highly specialised, and often innovative tasks within both the manufacturing supply chain and the downstream service sector³.

The European industry is a world leader in the production of civil aircraft, including helicopters, aircraft engines, parts and components. It is spread across Europe, covers all market segments, ranging from general aviation to business jets and commercial aircraft, rotor-wings, combat aircraft and military trainers, as well as unmanned vehicles, training and simulation services, Maintenance Repair & Overhaul (MRO) and air traffic management systems. Many start-ups are also contributing to innovative air mobility solutions, including drones, often using new propulsion technologies⁴.

In 2024, civil aeronautics directly employed more than 406,300 people in Europe and generated €129.1 billion in turnover, including €108.6 billion in exports⁵.

Supply chain bottlenecks threaten resilience

The European aeronautics sector continues to face major challenges following the Covid-19 pandemic and subsequent crises. Supply-chain disruptions, labour shortages, high energy prices and trade uncertainty continue to affect production across the industry. At the same time, global competition is intensifying - not only from the United States and China, but also from countries such as Brazil, Mexico, Morocco and Tunisia.

Despite these challenges, global demand for aircraft remains strong. Manufacturers have high ambitions, and estimate that more than 40,000 new aircraft will be needed worldwide over the next 20 years. In the short term, Europe's challenge is no longer demand, but production capacity. Repeated downward revisions to delivery schedules show that supply-chain bottlenecks are preventing manufacturers from increasing output at the required pace.

These bottlenecks reflect deeper structural weaknesses across the supply chain. Suppliers continue to face pricing pressure, volatile production planning, labour shortages and limited access to finance. As a result, many firms lack the capacity to invest in innovation, skills and modern production assets, leaving the supply chain fragile despite recovering demand, and undermining its resilience against future constraints⁶.

³ https://defence-industry-space.ec.europa.eu/system/files/2023-07/SWD_2023_280_1_EN_document_travail_service_part1_v3.pdf

⁴ https://defence-industry-space.ec.europa.eu/system/files/2023-07/SWD_2023_280_1_EN_document_travail_service_part1_v3.pdf

⁵ ASD, Facts and figures 2025: https://umbraco.asd-europe.org/media/hnmoyd3m/facts-figures-2025_web.pdf?rmode=pad&v=1dc605610202bb0

⁶ https://news.industriall-europe.eu/documents/upload/2026/4/639116797578547043_JUST_AVIATION_2026_raport_v2.pdf

Addressing these challenges requires a stronger European industrial strategy covering the entire aeronautics value chain. Strengthening the resilience of suppliers is just as important as supporting major manufacturers. In this context, industriAll Europe has actively addressed supply chain challenges through its EU-funded [FLY-SUS](#) project: Strengthening Cooperation through the Supply Chain for a Sustainable Transformation of the Aeronautics Sector.

EU policy framework and decarbonisation of aviation

Europe's aviation sector has committed to achieving climate neutrality by 2050 through the Destination 2050 roadmap, in line with the EU Green Deal and the Paris Agreement. The initiative brings together airlines, airports, aerospace manufacturers and air navigation service providers. By 2030, net CO₂ emissions from intra-European flights would be reduced by 55% compared to 1990 levels through a combination of fleet renewal, sustainable aviation fuel (SAF), operational improvements and the EU Emissions Trading System (ETS)⁷. This is all the more important since aviation is a hard-to-abate sector, among the most exposed to the physical and transition impacts from climate change.

Sustainable aviation fuels: the central pillar to decarbonisation

Sustainable aviation fuels (SAF) are essential to decarbonise aviation, but deployment remains far too slow. Scaling up SAF production, ensuring affordability, and strengthening European-based supply chains are therefore critical. This is important not only from the perspective of climate and energy policy, but also from the perspective of industrial resilience, employment, strategic autonomy and security of supply. Recent geopolitical instability, disruptions affecting international energy routes, and volatility in fuel and oil markets have shown the importance of reducing excessive dependence on external suppliers and vulnerable supply chains. The EU should establish a stable industrial and investment framework that supports SAF production in Europe and strengthens the European industrial base, while securing SAF demand despite its price premium.

Key EU initiatives: ReFuelEU Aviation and STIP

A major recent development is the ReFuelEU Aviation Regulation, adopted in 2023 and applicable from 1 January 2025. ReFuelEU Aviation establishes binding mandates on fuel suppliers to increase the share of SAF supplied at major EU airports: 2% in 2025, 6% in 2030, 70% by 2050. The Regulation also includes specific sub-targets for synthetic fuels starting at 1.2% in 2030 and increasing to 35% in 2050. ReFuelEU Aviation provides regulatory certainty and sends a clear demand signal to the market; as such, it should be safeguarded against pressures to weaken or delay. Nevertheless, early implementation shows that SAF uptake remains slow, largely due to insufficient production capacity and high costs⁸. Therefore, demand-side mechanisms should also be developed, such as double-side auctions, to unlock the offtake agreements that lack for many SAF projects to get to FID⁹. Such mechanisms should be designed to ensure a progressive transfer of costs from States to the aviation value chain, as SAF become more widespread and competitive and the risk of competition distortion decreases. Furthermore, oil and energy companies need to play a more proactive role by significantly increasing investment in SAF production capacity.

In November 2025, the European Commission adopted the Sustainable Transport Investment Plan (STIP), which recognises SAF as one of the most effective tools to cut emissions. STIP responds to the urgent need to unlock investments and scale up production of renewable and low-carbon fuels to meet the fuel

⁷ <https://www.destination2050.eu/>

⁸ https://transport.ec.europa.eu/transport-modes/air/environment/refueleu-aviation_en

⁹ <https://www.linkedin.com/posts/enabling-the-emergence-of-a-european-esaf-ugcPost-7441838197015240704-lsYR/>

targets set out in the ReFuelEU Aviation. However, the current level of EU financial support remains far below what is required to scale SAF production at the necessary pace. Without stronger investment signals and risk-sharing mechanisms, Europe risks falling behind global competitors in the race to secure sustainable fuel capacity.

Market-based measures: ETS and CORSIA

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) is a global market-based offsetting mechanism adopted by the International Civil Aviation Organisation (ICAO) in 2018. In parallel, the EU has its own carbon pricing scheme, the EU Emissions Trading System (ETS).

While aviation in Europe has been included in the EU ETS since 2012, it currently applies primarily to flights within Europe. The system still excludes the vast majority of emissions: extra-EEA flights that rely on CORSIA. The EU has allocated 20 million free ETS allowances to aviation for the period 2024–2030, with an estimated value of around €1.6 billion. These allowances are intended to bridge part or all of the price gap between conventional jet fuel and eligible alternative fuels, thereby supporting SAF uptake in the near term.

Looking ahead, the European Commission is reviewing the ETS and whether to extend the geographical scope of the ETS from 2027, taking into account developments under CORSIA. By 1 July 2026, the Commission is required to submit a report to the European Parliament and the Council assessing CORSIA's environmental integrity and ambition. If (i) ICAO has not strengthened CORSIA in line with the Paris Agreement, and (ii) the countries covered by CORSIA represent less than 70% of international aviation emissions, the EU ETS should expand its scope, as from January 2027, to departing flights from EEA airports to airports outside the EEA¹⁰.

A review of the ETS must ensure that decarbonisation of the aviation sector is effective, while it does not mean de-industrialisation. Regulatory stability and a smart evolution of carbon price are crucial to drive investment towards low-carbon technologies and reward front-runners, while blocking regression.

Research and innovation

Long-term reduction of aviation's impacts on climate will depend on technological breakthroughs. The Clean Aviation Joint Undertaking under Horizon Europe is the EU's leading research and innovation programme for transforming aviation towards a sustainable and climate-neutral future. As a European public-private partnership it supports the development of disruptive technologies in aircraft, engines, hydrogen, and electric propulsion, with a view to entry into service from the 2030s onwards.

In parallel, Single European Sky ATM Research (SESAR), also part of Horizon Europe, continues to drive efficiency and emissions reductions through digitalisation and modernisation of air traffic management. It should allow for R&D and at-scale trials of contrails avoidance and climate-optimised trajectories. Together, these initiatives form the EU's core research and innovation framework for decarbonising aviation while improving efficiency and competitiveness.

As part of the next long-term EU budget 2028-2034, the Commission is proposing to double the budget of the research and innovation framework programme to €175 billion. Additionally, Horizon Europe, tightly connected to the European Competitiveness Fund, will have the capacity to develop moonshot projects. These projects would move from research to demonstration and real-world deployment. Clean aviation has been identified as one of the strategic priority areas, with the objective of positioning Europe as a global leader in the development of the next generation of aircraft (CO₂-free, low/no NO_x), by bringing together industry and scientific capacities to achieve breakthroughs in clean aviation. These

¹⁰ [https://www.europarl.europa.eu/RegData/etudes/BRIE/2026/782615/EPRS_BRI\(2026\)782615_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2026/782615/EPRS_BRI(2026)782615_EN.pdf)

are positive steps but not enough. Research efforts in the field of aviation non-CO₂ impacts should be further supported, including the characterisation of NO_x impacts at altitude and of SAF/Hydrogen contrails, through scientific cooperation, industrial R&D and measurement campaigns. Without significantly increased investment into aviation research and innovation in the next MFF, Europe risks losing its technological leadership.

Other European initiatives

Beyond the EU's legislative framework, a range of European stakeholder initiatives and cooperation platforms are actively contributing to the decarbonisation of the aviation sector. IndustriAll Europe is part of two EU alliances, the Alliance for Zero Emission Aviation (AZE) and the Renewable and Low-Carbon Fuels Value Chain Industrial Alliance (RLCF Alliance). These Alliances aim to bring all stakeholders together to discuss and agree on how to ensure that the correct fuels and infrastructure are in place to decarbonise the sector. IndustriAll Europe will continue to raise trade union demands in these Alliances to ensure that workers' voices are heard.

A Just Transition for Europe's aeronautics workforce

Europe's aeronautics industry depends on a highly skilled workforce. As the sector undergoes green and digital transformation, its competitiveness will rely on its ability to attract, retain and develop skilled workers. Yet the industry faces growing labour and skills shortages driven by demographic change, technological developments and competition for talent. Managing this transition successfully requires investment in skills, quality jobs and strong social dialogue.

Investing in skills across the entire value chain

Ensuring long-term productivity and innovation requires sustained investment in skills, training and lifelong learning. This investment must benefit the entire aeronautics supply chain, including SMEs and subcontractors, where access to training is often more limited. High-quality apprenticeships, continuous upskilling and reskilling, skills transfer between generations and clear career progression pathways are all central to closing skills gaps and securing the workforce of the future.

European-level coordination can play an important role in supporting these efforts. IndustriAll Europe is part of the newly established joint European project Skills4ADC+, which aims to address critical and emerging skills gaps across the aerospace and defence sectors. Over the next two years, the project will support the development of forward-looking, inclusive, and cross-sectoral upskilling and reskilling strategies.

Managing digitalisation and AI with workers at the centre

Digitalisation, automation and artificial intelligence are transforming production, maintenance and management processes throughout the aeronautics sector. While these technologies can improve efficiency, safety and productivity, they also create risks linked to work intensification, algorithmic management and reduced workers' autonomy. The digital transition must therefore respect the principle of "human in control". This requires transparency, adequate training, and full respect for workers' rights to information and consultation. Social dialogue is essential to ensure that technological change improves working conditions rather than undermining them, while also ensuring that workers share fairly in the productivity and efficiency gains generated by digitalisation.

A Just Transition through quality jobs and social dialogue

The green and digital transition of European aviation and aeronautics must be socially fair and inclusive, ensuring that no worker or region is left behind. Any transformation affecting jobs, production or skills needs must be anticipated and discussed with workers' representatives, including assessments of employment and skills impacts. A Just Transition requires quality jobs, including stable employment, fair

wages, safe working conditions and access to training and career development. Adequate reskilling and upskilling, fair job-to-job transitions and strong health and safety protections are essential.

Strong social dialogue at company, sectoral and European level is indispensable to managing change and building trust. Workers must have a meaningful seat at the table in all major transformation processes. A socially responsible approach is not only a matter of fairness, but also a prerequisite for long-term industrial success.

IndustriAll Europe's demands and recommendations

Building a sustainable and resilient value chain:

- The European Commission must develop a new European aviation and aeronautics strategy with a strong focus on improving the sustainability and resilience of the full value chain and a Just Transition for the workers.
- This strategy should explore various prospective scenarios to enhance aviation resilience, considering the risks of geopolitical or climate-related impacts on macro-economy, as well as future constraints on decarbonised energy resources.
- Develop 'Made in Europe' and local content strategies to stabilise supply chains, protect European jobs and value creation. Introduce binding social conditionalities on all public funding and subsidies, requiring concrete employment and investment commitments in return for public support to the aerospace sector.
- Strengthen European-level coordination and cooperation across the entire aeronautics value chain.
- Develop new risk-sharing contract models between OEMs and European suppliers to prevent the disproportionate transfer of risks to subcontractors.
- Main contractors must take responsibility for labour standards and business practices throughout the value chain by preventing unfair commercial practices and excessive margin squeezing.
- Secure EU strategic autonomy in critical raw materials, rare earths and energy needed for aeronautics production.
- Provide targeted support for SMEs to address cybersecurity challenges, ensuring that compliance and security requirements do not fall disproportionately on suppliers and that OEMs continue to share responsibility.
- Establish permanent short-time work or furlough mechanisms in the various European countries, enabling suppliers to preserve jobs and skills during temporary economic downturns and industrial crises.

Investments and decarbonisation:

- A strong European investment strategy for the net-zero transition, including a substantially increased investment agenda in the Multiannual Financial Framework (MFF), revised fiscal rules, and binding commitments from companies to support the industrial and social transformation of the aeronautics sector.
- Increase public and private funding for aviation research and innovation. Invest in R&D programmes, especially in relation to green technology to lower emissions and non-CO₂ impacts, including hydrogen and electric-powered aircraft.
- Stronger involvement of subcontractors and SMEs in research and innovation. Early involvement of Tier 1 and Tier 2 suppliers in the research and development processes of the new aircraft programmes (Next Gen Single Aisle), particularly by the OEM, is essential.

This allows the supplier industry to fully unfold its innovation potential and optimally prepare for new production processes and increasing production rates.

- Improved financial resilience and access to affordable finance across the aeronautics value chain, ensuring that companies, suppliers and regions can invest in decarbonisation, innovation, and long-term industrial capacity. To address this bottleneck in access to capital, purposeful political support and new financing models are required. Specifically, investment and innovation incentives (e.g., for digitalisation and ecological transformation) must be implemented as grants, guarantees, or innovative loan programmes (co-investments).
- Provide greater resources to the European Union Aviation Safety Agency (EASA) in the next MFF to support certification and regulation of new technologies.
- The transformation to climate-neutral aviation - through sustainable aviation fuels (SAF), fuel efficiency improvements, electrification (including hydrogen) and climate-optimised flight trajectories - requires massive investments. To reduce investment barriers, a long-term political strategy is needed regarding guaranteed purchase volumes and specifications, as well as the expansion of affordable renewable energy and the necessary infrastructure.
- Increase investment and policy support to scale up SAF production in Europe, develop demand-side mechanisms and strengthen SAF sustainability criteria.
- Promote the emergence of European sustainable fuel production chains, reducing dependence on imported fossil fuels while boosting industrial competitiveness, resilience and strategic autonomy.
- Ensure that carbon pricing mechanisms (EU ETS) support the transition while maintaining industrial competitiveness.

Skills, quality jobs and a Just Transition:

- Increase the attractiveness of workplaces and production sites. Strengthen job quality and workers' rights across the entire supply chain by ending precarious work, guaranteeing good working conditions, and ensuring full respect for workers' rights for all workers, including temporary workers and subcontractors.
- Employers must commit to quality social dialogue and collective bargaining at all levels of the supply chain, at both national and European levels. This includes ensuring the effective involvement and recognition of trade unions, employee representatives and European Works Councils, respecting workers' rights to information and consultation, and promoting comprehensive collective agreements to anticipate and manage structural change in a socially fair way.
- Invest in skills, training, and lifelong learning, including high-quality apprenticeships, upskilling and reskilling for all career stages, internal mobility, and skills intelligence to anticipate future occupational and skills needs and avoid shortages.
- Ensure high health and safety standards for all workers, particularly when introducing new green, digital, and AI-based processes and deploying new fuels and technologies.
- Manage green and digital transitions through early and inclusive planning, involving trade unions and public authorities, developing Just Transition Plans, and deploying tools to anticipate and mitigate their impacts across the supply chain.
- Address the risk of a potential air traffic moderation, related either to macro-economic shocks from geopolitical tensions or climate change, or to a constrained availability of decarbonised energy resources.

- Shape the introduction of artificial intelligence and new technologies around people, ensuring AI complements rather than replaces workers, expanding workplace co-determination, and keeping human control at the centre of technological change.
- Develop a European Aeronautics and Defence Skills Passport to enable cross-border and cross-sector recognition of skills, facilitate mobility between companies and regions, and support dual-use career pathways between civil aeronautics and defence.

Europe still holds global leadership in civil aeronautics, but this position cannot be taken for granted. Without coordinated industrial policy, massive investment and strong social dialogue, Europe risks losing both technological leadership and high-quality industrial jobs.

The forthcoming EU Aviation and Aeronautics Strategy therefore represents a crucial opportunity to build a resilient, sustainable and socially just aeronautics ecosystem to keep good industrial jobs in Europe.