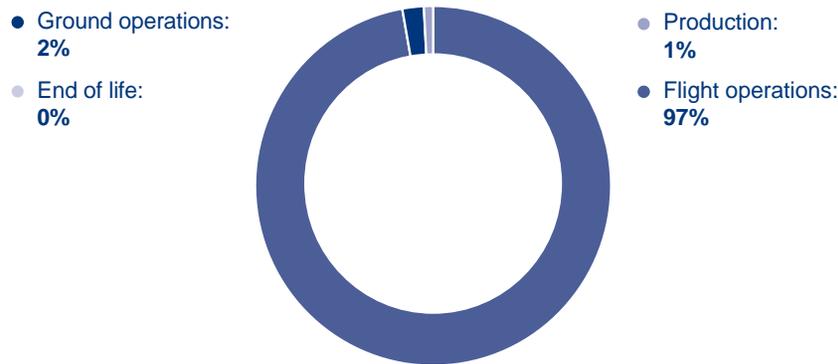


Illustration of a Typical Commercial Aircraft Lifecycle GHG Distribution*



* Initial assessment for illustrative purposes only.

Products in Operation

In the last 60 years, the aviation industry has cut fuel consumption and CO₂ emissions per seat / kilometre by more than 80%, NO_x emissions by 90% and noise by 75% of aircraft in operation.

Whilst this performance is impressive, Airbus and the aviation industry recognise the importance to continue improving the sector's environmental performance in all areas – from noise to air quality and GHG emissions, notably CO₂. Due to the industry's short- and mid-term reliance on hydrocarbon fuels as well as potential additional impacts from non-CO₂ factors, the reduction of aviation's impact on climate change remains an environmental challenge.

Airbus, along with airlines, airports, air traffic management and other manufacturers, committed in 2008 to sectoral CO₂ emission goals (ATAG):

- improve fleet fuel efficiency by an average of 1.5% per annum between 2009 and 2020;
- stabilise: from 2020, net carbon emissions from aviation will be capped through carbon neutral growth (CNG); and
- by 2050, net aviation carbon emissions will be half of what they were in 2005.

The Company is actively working on a greater decarbonisation potential through new fuels and energies, technology and innovations (aiming at zero emissions flights) and carbon offsetting. Meeting these challenging goals will require a truly collaborative approach across the industry, investors and financial institutions, governments and civil society, focused on a combination of improvement measures encompassing technology (including sustainable fuels), operational improvements, infrastructure (including air traffic management) and market based measures.

Sustainable aviation fuels (“SAF”) are vitally important to the decarbonisation potential of our sector. These are not just “a nice to have” and as such the Company is fully engaged with other industry partners to drive the development of the industry. Airbus is the first manufacturer to offer delivery flights on sustainable fuels and intends to use SAF for test flights and Beluga flights as well as increasing the opportunity for more delivery flights. The first Beluga flight with SAF is an important milestone towards Airbus' decarbonisation strategy. Airbus plans to progressively use SAF in its new fleet of Beluga XLs and plans to deploy this to other operational bases in Europe.

Beyond climate change, the Company also focuses on reducing the other aspects of the environmental impacts of aircraft in operations. For instance, the Airbus Noise Technology Centre

based at the University of Southampton is continually modelling and testing to better understand noise, its sources and solutions to be embedded into current and future products.

Substances Roadmap

Many substances used in the global aerospace industry to achieve high levels of product quality, safety and reliability are subject to strict regulatory requirements.

In the aerospace industry, regulations on substances impact key processes and products, such as surface treatments, paints and fire protection. The Company remains committed to move towards replacement of such substances in products and processes. To help achieve this, the Company has put in place a portfolio of activities and projects, working with suppliers to identify, develop, qualify and deploy new technologies and solutions that avoid the use of substances classified as posing a risk to human health or the environment, whilst satisfying airworthiness, certification and performance requirements. The Company also engages with suppliers to promote the adoption of a similar approach through regular communication and, more widely, by working together with the aerospace industry to promote worldwide harmonisation of regulations and ways of working, taking into account the sector's safety and lifecycle specificities.

Using information obtained from its suppliers, the Company tracks, registers, assesses and declares regulated substances. Since 2011, the Company has analysed the impact of over 1,100 substances and qualified and deployed substitutes for over 100 substances in 300 products. Currently, the Company is actively working to substitute 65 substances in its own design, and an additional 45 in its supply chain, over the next 5 years.

Airbus invests substantial time and resources in research and development for technologies that use alternatives to regulated substances. When it can be demonstrated that these technologies meet the strict safety and reliability criteria required for aviation, Airbus seeks to implement them in its aircraft design and manufacturing.

For example, in 2006, the Airbus Chromate-Free project was launched with the aim of developing, qualifying and deploying chromate-free alternatives to materials containing and processes using chromates in aircraft production and maintenance. Chromate-free external paint systems developed initially for the A380 programme are now used in all Airbus commercial aircraft manufacturing programmes and across the aerospace industry.