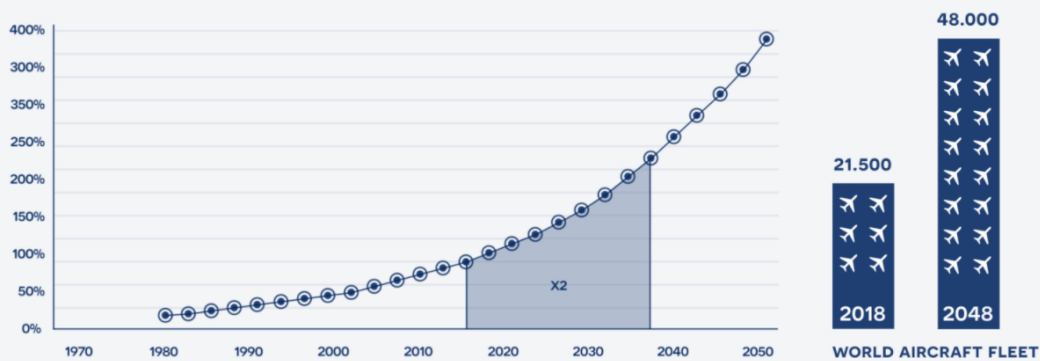


ENVIRONMENTAL IMPACT

Cleaner air is our aim.

## WORLD ANNUAL AIR TRAFFIC DEVELOPMENT

EXPONENTIAL GROWTH OF THE WORLD ANNUAL AIRCRAFT TRAFFIC DEVELOPMENT WITHIN THE NEXT 20-30 YEARS.



**Air traffic development**  
Exponential growth of the world annual aircraft traffic development within the next 20-30 years.

ENVIRONMENTAL RESPONSIBILITY →

Since the beginning of commercial air travel, **airplanes have brought the world closer together**. In the latest Annual Review of the International Air Transport Association (IATA) it is stated that airlines connected a record number of **20,000 unique city pairs around the globe**. Compared to the mid-1990s, this represents a doubling in the connectivity. Therefore, more and more people from both emerging and developed countries choose air travel as their transport mode. This demand is expected to grow steadily in the future. According to latest forecasts by industry experts the **total number of passengers will double over the next 20 years**, leading to an enormous demand for additional aircraft. Unfortunately, for every up, there is a down. **Aviation is responsible for 12% of CO2 emissions from all transport sources**. About 80% of these emissions are caused by flights beyond 1,500 kilometers, for which there is no practical alternative mode of transport, e.g., intercontinental or long-haul flights. Besides carbon dioxide, aircraft also emit noise, heat, particulates and gases such as nitrogen oxides which also contribute to the climate change.

The **aeronautical community is aware of the environmental impact** of aviation, especially when the aforementioned increase of air traffic is considered. To **take responsibility**, the Advisory Council for Aviation Research and Innovation in Europe (**ACARE**), was set up by the European Commission and **formulated several ambitious goals** in the European Vision "Flightpath 2050". These include (but are not limited to)

- reduction in CO2 emissions of 75%,
- reduction of NOx emissions of 90% and
- reduction of the perceived noise emissions of flying aircraft by 65%

compared to the capabilities of typical new aircraft in the year 2000.

**Clean Sky 2 aims to be the main contributor to these goals**. It is a public-private-partnership between the European Commission and the European aeronautics industry and the successor of the initial Clean Sky program.

