## Scope of aviation

## These figures

 reflect the pre-Covid-19 situation: a ‘normal’ year for air transport.Separate analysis has been done on the impact of Covid-19 on the sector.

## 4.5 billion

Passengers carried, 2019

## 46.8 million

Scheduled commercial flights, 2019

### 8.68 trillion

Passenger kilometres, 2019
1,478
Commercial airlines

## 162

Air navigation service providers
3,780
Airports with scheduled commercial flights (41,764 airfields in total, worldwide)
33,299
Commercial aircraft in service ( $84 \%$ of which are jet aircraft)

## 48,044

Routes served globally, 2019 (of these, 21,187 unique city pairs are served)

## Lifelines

Air transport provides vital links to communities in remote parts of the world, including small island states.

## Emergency

When disaster strikes, aviation can rapidly move relief supplies to disaster zones. Airports become staging posts for rescue operations.

## 272 million

People worldwide that live outside the country of their birth - aviation provides connections.

## 58\%

International tourists travelling by air, 2019

## Every day in 2019

» 12.5 million passengers
» 128,000 flights
» $\$ 18$ billion worth of goods carried

## Every 60 seconds

» A single jet aircraft flies 15 kms
" The fan blade in a typical jet engine will rotate 4,000 times
» \$12.4 million worth of world trade carried
» 8,643 passengers board aircraft around the world
» 69,000 data messages are sent over the specialist SITA network
» $\$ 6.6$ million worth of economic activity supported by aviation
" 9,452 bags are accepted into the global luggage handling system
» 89 flights take off worldwide
82.5\%

Average load factor on aircraft, 2019
www.aviationbenefits.org

## Supporting SDGs

Safe, reliable, efficient and cost-effective air transport is an essential component of a broader mobility strategy to help achieve the United Nations 2030 Agenda for Sustainable Development.

The global aviation sector has a role to play in 15 of the 17 Sustainable Development Goals, some in small ways and others with much more significant influence.

See the ways we contribute to the SDGs at: www.aviationbenefits.org/SDGs

## Economic benefits

## 87.7 million

Jobs supported by aviation worldwide
» 11.3 million direct jobs in the industry:

- 648,000 at airport operators
- 5.5 million in other on-airport jobs
- 3.6 million at airlines
- 1.3 million in civil aerospace
- 237,000 at air navigation service providers
» 18.1 million jobs supported through the aviation industry supply chain
» 13.5 million jobs through induced benefits of industry and employee spending
» 44.8 million jobs supported in the tourism industry


## \$3.5 trillion

Global contribution to GDP, 2018 (4.1\% of world economic activity)

## 4.3x

Aviation jobs are, on average, 4.3 times more productive than other jobs

## 35\%

Worldwide trade by value carried by air transport, 2018 (\$6.5 trillion). By volume: 0.5\%

## 17th

If aviation were a country, it would rank 17th in size by GDP

## Regional statistics

| Region | Jobs supported | GDP supported | Passengers (2019) | \% of global passengers | Annual growth 2018-2038 | Flights (2019) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AFRICA | 7.7 m | \$63 bn | 115 m | 2.5\% | 3.4\% | 1.3 m |
| ASIA-PACIFIC | 46.7 m | \$944 bn | 1.7 bn | 37\% | 4.2\% | 12.8 m |
| EUROPE | 13.5 m | \$991 bn | 1.2 bn | 26\% | 2.1\% | 9.1 m |
| LATIN AMERICA AND THE CARIBBEAN | 7.6 m | \$187 bn | 356 m | 7.7\% | 3.2\% | 3.2 m |
| MIDDLE EAST | 3.3 m | \$213 bn | 192 m | 4.2\% | 4.1\% | 1.3 m |
| NORTH AMERICA | 8.8 m* | \$1.1 trn* | 1 bn | 22.7\% | 2.1\% | 10.6 m |

*In the USA, the FAA also collects employment and economic impact data, but includes domestic tourism and general aviation in its figures (not included in this conservative analysis). With these wider catalytic impacts, civil aviation jobs in the USA alone amount to 10.9 million, with $\$ 1.1$ trillion contribution to GDP.

## Environmental

responsibility

## Targets

World-first targets for $\mathrm{CO}_{2}$ reductions for a global sector, set by the industry in 2008:

1. Improve $1.5 \%$ per annum average fleet fuel efficiency between 2009 and 2020 (currently at $2.1 \%$ rolling average improvement)
2. Stablise net $\mathrm{CO}_{2}$ emissions from 2020 through carbon-neutral growth (will be made possible through the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) at ICAO)
3. Reduce net $\mathrm{CO}_{2}$ emission from aviation to half of 2005 levels, by 2050 (through new technologies and sustainable aviation fuels)

## \$188 billion

Spent by airlines on fuel, 2019

## CORSIA

The world's first global offsetting scheme for any single sector: www.enviro.aero/CORSIA

## 914 million

Tonnes of $\mathrm{CO}_{2}$ emitted by airlines in 2019, 2\% of the global man-made total of 43 gigatonnes

## 80\%

of aviation $\mathrm{CO}_{2}$ emissions are from flights over $1,500 \mathrm{~km}$ in length
-54.3\%
CO2 emissions per passenger kilometre since 1990 through technology and operations

## 270,000

Flights on sustainable aviation fuel (SAF) since 2011: see www.enviro.aero/SAF for updates

## 11 billion tonnes

$\mathrm{CO}_{2}$ avoided since 1990 via new technology, better operations, improved infrastructure

## $\$ 15$ billion

Spent each year by aerospace companies on research for aircraft technology efficiency

