

EUROPE¹⁸¹

Air transport supports 12.2 million jobs and \$823 billion in European economic activity.
That is 3.3% of all employment and 4.1% of all GDP in European countries in 2016.

Every person directly employed in the aviation sector and in tourism made possible by aviation supported another 4.7 jobs elsewhere in Europe. Similarly, \$4.30 of economic activity was supported elsewhere in Europe for every \$1 of gross value added directly created by the air transport sector.

The aviation sector in Europe directly employed an estimated 2.6 million people in 2016. A sub-sectoral analysis of these workers suggests that:

- » **519,000 of them (20% of the total) were employed by airlines or handling agents** as, for example, flight crew, check-in staff, maintenance crew, or head office staff;
- » **166,000 (6.5%) had jobs with airport operators** in, for example, airport management, maintenance, and security;
- » **1.5 million (57.5%) worked on-site in airports** at, for example, retail outlets, restaurants, and hotels;
- » **341,000 (13%) were employed in the manufacture of civil aircraft** (including systems, components, airframes, and engines); and
- » **77,000 (3%) worked for air navigation service providers** in, for example, air traffic control and engineering.

Airlines, airport operators, retailers and other on-site businesses at airports and air navigation service providers and civil aircraft manufacturers also contribute to GDP in Europe. In 2016, the operations of these businesses directly generated a \$193 billion contribution to GDP.

The aviation sector's spending with suppliers is estimated to have supported a further 3 million jobs and a \$226 billion gross value added contribution to GDP. In addition, wage payments to staff – by the aviation sector and businesses in the aviation sector's supply chain – supported nearly 1.5 million more jobs and a \$111 billion gross value added contribution to GDP.

The aviation sector also facilitates a substantial amount of tourism in Europe. This stimulates still more economic activity, as tourists spend their money with restaurants, hotels, retailers, tour operators, and other providers of consumer goods and services. In 2016, spending by foreign visitors who flew to European countries supported an estimated 5.1 million jobs and a \$293 billion contribution to GDP.

In total, accounting for the sector's direct impact, its supply chain impact, its wage expenditure impact, and the impact of tourism made possible by air transport, the aviation sector supported an estimated 12.2 million jobs and an \$823 billion contribution to GDP in Europe in 2016.

Air travel in Europe is expected to continue to grow at about 3.4% per year over the next two decades. This increase will, in turn, drive growth in the economic output and jobs that are supported by the air transport industry over the next 20 years. Oxford Economics forecasts that by 2036 the impact of air transport and the tourism it facilitates in Europe will have grown to support 18 million jobs (49% more than in 2016) and a \$1.6 trillion contribution to GDP (a 90% increase).

Europe, particularly Western Europe, is one of the most established regions of the world for air transport activity. However, emerging economies in the east are contributing to the overall growth in the region, with employment in the European aviation industry expected to grow 2% per annum to 2034. This growth and the restrictions on development across much of Europe are leading to capacity shortfalls.

As part of its Challenges of Growth series, in 2018 Eurocontrol released a report forecasting air traffic in Europe in 2040 and the difficulty meeting projected demand¹⁸². The forgone economic impact associated with this unmet demand is estimated to be \$103 billion (€88.1 billion) in GDP, including direct activity at airports, indirect and induced impacts, and the lost tourism, trade and investment due to low-connectivity growth. Furthermore, the majority of this loss is in the general economy, not the airports or aviation sector.

The European industry is one of the most heavily regulated in the world in terms of social rights, consumer protection and the environment.

1 billion

passengers

1.95 trillion

RPKs

363

airlines

44

air navigation service providers

10.1 million

tonnes of freight

8,544,000

flights

671

commercial airports

6,934

aircraft in service

82%

average regional load factor



Europe's share of global passenger traffic, 2017



Investing in green energy

Public transport at and around Amsterdam's Schiphol Airport has become greener thanks to the introduction of 100 electrically powered buses. Together, they comprise the biggest zero-emissions bus fleet in Europe, which will further increase to 258 buses by 2021. The new fleet is part of Schiphol's efforts to become climate-neutral by 2040.

Other airports around the world have joined in by acquiring electric ground vehicles. Brussels Airport will receive an all-electric fleet in 2019. By switching twenty diesel-operated buses to electric, Los Angeles International Airport will reduce carbon dioxide emissions from 308 tonnes of greenhouse gases per year to zero.

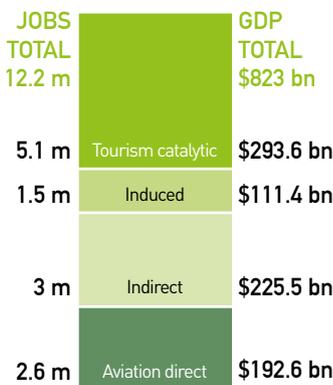
In another effort to become greener, Schiphol, Rotterdam, Eindhoven and Lelystad airports are now powered by sustainable energy, supplied by the Dutch company Eneco. Together, the airports consume around 200 GWh, comparable to the consumption of 60,000 households.

The operator of the four airports, Royal Schiphol Group, worked with Eneco to open a new wind farm which partially covers the need for the airports' green energy. By January 2020, all the power for the airport company will come from newly constructed Dutch wind farms. Until these have been built, the power will come from existing sustainable energy sources in the Netherlands.

The decision to use new wind farms means that Schiphol will not be drawing power from the existing sustainable energy network but rather promote its expansion.

Cochin International Airport, located in southern India, is the first airport in the world to run completely on solar power. It started by installing 400 solar panels on its rooftop as a small pilot project in 2013. Two years later, more than 46,000 solar panels tapping the power of sunlight made the airport totally self-sufficient in meeting its energy needs.

Total jobs and GDP supported by air transport in Europe



Direct jobs generated by air transport in Europe

