

## FIGURES ON SWISS CIVIL AVIATION

### Licenses

	2016	2017	2018
Private pilot PPL(A)	4'777	4'695	4'536
Commercial pilot CPL(A)	1'083	1'050	1'062
Airline pilot ATPL(A)	2'492	2'490	2'437
Airline pilot motor ATPL(A) MP OPS only	119	140	157
Multi-crew license (MPL/A)	70	52	27
Instrument Rating IR(A)	3'568	3'320	3'409
Helicopter pilot	993	957	944
Instrument Rating IR(H)		183	214
Glider pilot	1'766	1'675	1'717
Aeronaut	247	242	227
Validation of foreign licenses	8	10	8
Engineer on board	3	1	0
On-board radiophone operator	5	6	5
Maintenance personnel	2'887	2'901	2'854
Flight Instructor Aeroplane FI(A)	586	578	565
Flight Instructor Helicopter FI(H)	224	230	242
Flight Instructor Sailplane FIS	304	299	301
Flight Instructor Balloon FI(B)	20	25	27
Instrument Rating Instructor IRI(A)	148	154	152
Instrument Rating Instructor IRI(H)	17	18	17

Source: FOCA

### General facts

Operating a **short- and medium-haul aircraft generates** 40 to 120 jobs, a long-haul aircraft even 210 jobs. Source: Swiss

Per **million passengers** 750 to 1000 jobs are secured at national airports. Source: SIAA

The Swiss **business aviation industry** secures around 34'000 direct and indirect jobs and generates an annual turnover of 15 billion francs. Source: SBAA

In 2018, **Swiss airlines** serviced 212 destinations in 62 countries and 6 in Switzerland. In total a transport network of 550'857 kilometres abroad and of 866 kilometres on domestic territory were flown over. Source: FOCA

In 2018, **Skyguide air traffic control monitored** in total 1'298'754 instrument flights (plus 5 percent compared to 2017), of which 808'445 were transit flights over Switzerland (plus 7.5 percent). Source: Skyguide

## CIVIL AVIATION AND ENVIRONMENT

### CO<sub>2</sub> emissions caused by air traffic

Aviation's annual CO<sub>2</sub> emissions in Switzerland and for international air traffic from Switzerland to destinations abroad amount to **5.4 million tons** of CO<sub>2</sub> according to the FOEN greenhouse gas inventory. This equals a share of 0.6 percent of aviation's global CO<sub>2</sub> emissions of 895 million tons CO<sub>2</sub> in total.

Source: IATA, Federal Statistical Office, Civil Aviation,  
Swiss Civil Aviation Statistic 2017-7 Fuel Consumption and Pollutant Emissions

The domestic share amounts to approximately **0.1 million tons** CO<sub>2</sub> (military aviation excluded). All **international flights** departing from Switzerland amount to a global share of **one thousandth** (0.1 per mil) of fossil CO<sub>2</sub> emissions caused by humans.

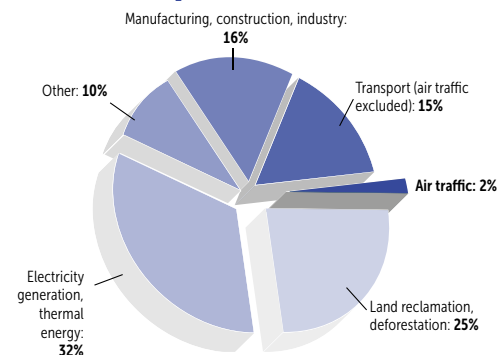
All international flights departing from Switzerland amount to approximately **10 percent** of the CO<sub>2</sub> emissions recorded by the FOEN greenhouse gas inventory for the Swiss territory.

CO<sub>2</sub> emissions per passenger kilometre averaged over whole fleets and short-haul and long-haul routes today are typically significantly **below 100 grams of CO<sub>2</sub>** per passenger kilometre.

Especially the **fleet renewal** in Switzerland has led to a significant reduction of CO<sub>2</sub> emissions per passenger kilometre. If one considers the figure for 1990 as 100 percent, it has dropped to under 55 percent in 2017.

Worldwide, approximately 90 percent of all airlines use the ICAO Carbon Offsetting and Reduction Scheme for International Aviation **CORSIA** which will compensate air traffic's CO<sub>2</sub> growth from 2021. The airline industry is therefore the **first transport industry** which globally addresses the climate issue.

### Breakdown of CO<sub>2</sub> emissions by sector



Source: World  
Research Institute WRI

A E R O  S U I S S E



ENGLISH VERSION

SWISS AEROSPACE FACTS 2019

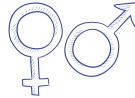
# THE ADDED VALUE OF SWITZERLAND'S CIVIL AVIATION

In the Report on Aviation Policy the **Federal Council** states the outstanding importance of civil aviation for Switzerland.



**Total added value**  
33.5 billion francs per year

**Total workforce**  
over 190'000



The 2018 "Ecosystem Swiss Aviation" study of the Boston Consulting Group emphasises the importance of the Swiss airports: the monetary contribution of the airports to the gross domestic product (GDP) amounted to **16.6 billion francs** or 2.5 percent and about 120'000 jobs.

Direct effects (revenues at airports)	6.3 billion
Indirect effects (revenues of suppliers)	1.8 billion
Induced effects (multiplying factor)	8.5 billion

According to the Federal Finance Administration the share of **transport** in **federal expenditure for 2018** amounts to 14.7 percent in total or 10.4 billion francs.

Rail transport	6.12 billion	(59%)
Road transport	4.15 billion	(40%)
Aviation	0.13 billion	(1.3%)

Over 1000 highly qualified employees work in the Swiss aerospace industry. Switzerland's contribution of 150 million per year to the ESA provides a boost to innovation in over 80 Swiss companies.

Source Swissmem

**38 percent of all tourists** arrive in Switzerland by airplane.

Source Swiss

**Over 50 percent** of Swiss exports are transported by air freight.

Source Swiss

In 2018, a Swiss long-range aircraft consumed **2.8 litres of fuel** per 100 passenger kilometres.

Source Swiss

A good international accessibility isn't only of outstanding importance for the economy but also for science and culture.

Source Komitee Weltoffenes Zürich

# FIGURES ON SWISS CIVIL AVIATION

## Passengers at Swiss airports operating scheduled flights

	2016	2017	2018
Zurich	27'666'428	29'396'094	31'102'917
Geneva	16'532'690	17'351'816	17'677'035
Basel	7'314'265	7'888'725	8'578'064
Berne	183'320	182'917	145'446
Lugano	176'688	144'087	88'570
St.Gallen-Altenrhein	108'413	124'588	125'000
<b>Total</b>	<b>51'981'804</b>	<b>55'088'227</b>	<b>57'717'032</b>

Scheduled and charter flights / Source SIAA

## Air cargo at airports operating scheduled flights

(Figures in tons, substitute transportation by truck excluded)	2016	2017	2018
Zurich	313'098	350'961	356'083
Geneva	49'757	40'062	46'387
Basel	55'300	64'270	62'848
Lugano		52	45
<b>Total</b>	<b>418'155</b>	<b>455'345</b>	<b>465'363</b>

Sources FOCA, ZRH, GVA, EAP

## Flight movements at national and regional airports

	2016	2017	2018
Zurich	269'160	270'453	278'365
Geneva	189'840	190'778	187'162
Basel	95'545	95'610	97'268
Grenchen	66'854	68'559	63'747
Birrfeld	71'127	66'388	66'454
Berne	50'207	47'659	44'381
Sion	37'119	41'921	41'914
Lausanne	38'127	38'717	36'515
St. Gallen-Altenrhein	26'382	28'774	28'059
Lugano	19'577	18'673	18'306
Samedan	14'961	16'108	14'543
Ecuwillens	14'842	14'899	17'910
Les Eplatures	12'015	11'199	10'723
Bressaucourt	8'072	8'343	7'751
<b>Total</b>	<b>913'828</b>	<b>918'081</b>	<b>913'098</b>

Source FOCA

53 percent of the GDP are generated from exports and over 10'000 multinational companies are established in Switzerland.

Source Boston Consulting Group

# FIGURES ON SWISS CIVIL AVIATION

## Airports and aerodromes

	2016	2017	2018
National airports	3	3	3
Regional airports	11	11	11
Air bases	7	7	7
Airfields	48	51	49
Heliports	24	25	24

Source FOCA

## Companies

	2016	2017	2018
Scheduled airlines	8	8	5
Non-scheduled airlines	62	53	38
Maintenance companies	85	84	83
Flight training schools	141	137	141
Hang-gliding schools label FSVL	65	69	72
Hang-gliding schools	67	49	43
Skydiving schools	14	14	14
Manufacturers	18	20	20
Handling companies	4	4	4

Source FOCA

## Aircrafts

	2016	2017	2018
Fixed-wing airplanes	1'823	1'786	1'773
Helicopters	337	335	335
Motorized fixed-wing gliders	249	249	245
Gliders	658	625	599
Hang-gliders	15'780	16'129	16'798
Drones	10'280	15'000	<100'000
Balloons	339	329	323
Airships	8	9	9

Source FOCA

## AEROSUISSE, the umbrella organisation for Swiss aerospace

AEROSUISSE, founded in 1968, aims as an umbrella organisation to safeguard the interests of Swiss aerospace and to secure its livelihood. AEROSUISSE influences the framing of legal bases in the aerospace sector. Today, over 150 companies and organisations belong to AEROSUISSE. These include airlines and charter airlines, national and regional airports, aerodromes, handling companies, air traffic control, maintenance companies, aircraft and components manufacturers, the Air Force, aerospace companies, flight training schools, aviation-oriented service providers, all decisive Swiss aviation associations as well as other companies related to aerospace.

[www.aerosuisse.ch](http://www.aerosuisse.ch)