T&E

BRIEFING May 2026

Airport Tracker

Aviation emissions uncovered

1 billion +	24%	4 of top 20
Tonnes of CO2 generated by flights from the 1,300 largest airports globally.	European airports are responsible for a fourth of the total emissions.	London, Paris, Istanbul and Amsterdam are among the cities with the highest airport emissions globally.

This global inventory of CO2 and air pollution from passenger, freight and private air travel reveals the climate and health impacts of 1,300 airports. It shows the disproportionate impact of a small number of airports: Europe is responsible for a fourth (24%) of the total emissions, and includes 4 of the top 20 cities with the highest airport emissions globally. More details in data tables below.

T&E recommendations

- **Plans for expansion of airport capacity should be paused** to conduct a critical review of up-to-date, regionally-specific evidence on claimed economic benefits. In regions where air connectivity no longer drives growth in GDP per capita, nor quality tourism value, airport expansion should be ended.
- **Airport capacity should align with climate, health and environmental goals.** In the short term, flight restrictions and slot allocation are swift and effective tools to address CO_2, air and noise pollution.
    - In line with the EU's aim to strengthen rail as an alternative to short-haul and even longer flights, rail should be further prioritised on feasible routes, supported by a robust Article 20 in the Air Services Regulation.
    - Operating restrictions are the measure most immediately available to protect citizens from noise pollution, and should be prioritised in the Balanced Approach Regulation.
    - Airport slot allocation should promote cleaner fuels and aircraft via the Slot Regulation, based on criteria such as the prioritisation of slots for more sustainable operations.
- **Public funds should be invested in green infrastructure** for e-kerosene and

zero-emission aircraft, not airport operations nor their expansion, in the next EU budget 2028-34 as well as state aid in any way or form, and in ongoing European Investment Bank lending.

- **Transport and tourism strategies should foster sustainable connectivity and optimise the societal value of the airport network.** This includes maximising business benefits and social equity, while minimising environmental costs.

Airports shape aviation activity and thus the trajectories of greenhouse gases, local air pollutants and noise emissions over decades. Expansion of airport capacity drives increases in flight activity, locking in higher levels of traffic and emissions for decades, and deepens reliance on oil-based fuels and exposure to volatile energy markets.

Aircraft landing and take-off cycles (LTO) generate highly localised air and noise pollution, which affects the health of people working in and living near airports. With six airports, London ranked as the most polluting across all metrics - CO2, nitrous oxide (NOx), Carbon Monoxide (CO), total hydrocarbons (HC) and particulate matter (PM2.5).

The economic rationale traditionally used to support airport expansion is weakening. Emerging evidence shows the benefits of increased air connectivity are more uneven than previously assumed. In Europe, air connectivity drives economic growth in only a limited number of regions. Managing airport capacity is one of the key strategic levers capable of ensuring aviation contributes meaningfully to a net-zero society.

The 20 airports with the largest CO2 emissions in Europe

Rank	Airport Name	Country/Territory	Number of Flights	Total CO_2 emissions (million tonnes)
1	London Heathrow	United Kingdom	229,941	21.0
2	Paris Charles de Gaulle	France	228,131	14.7
3	Frankfurt	Germany	214,577	14.4
4	Istanbul	Turkey	249,788	12.8
5	Amsterdam | Schipol	Netherlands	228,994	11.0
6	Madrid-Barajas	Spain	193,849	8.8
7	Munich	Germany	150,230	5.0
8	Rome | Fiumicino	Italy	132,576	4.9
9	Zurich	Switzerland	121,125	4.6
10	Moscow | Sheremetyevo	Russian Federation	103,502	4.6
11	London Gatwick	United Kingdom	128,732	4.3
12	Barcelona El Prat	Spain	158,938	4.1
13	Lisbon | Humberto Delgado	Portugal	112,833	4.0
14	Milan Malpensa	Italy	100,166	3.9
15	Brussels	Belgium	94,121	3.3
16	Paris Orly	France	103,340	3.3
17	Dublin	Ireland	120,070	3.3
18	Antalya	Turkey	109,374	3.2
19	Manchester	United Kingdom	89,968	3.0
20	Vienna	Austria	117,139	2.8

The 20 cities with the highest airport emissions globally

Rank	Airport City Code	Number of Airports	Number of Flights	CO2 Total Flights (million tonnes)	NOx	HC	CO	PM2.5
					LTO Only (tonnes)			
1	London (LON)	6	547,501	29.2	9,571	556	5,910	36
2	New York City (NYC)	4	651,054	28.5	8,865	535	5,873	38
3	Dubai (DXB)	2	227,127	24.8	8,039	498	4,764	20
4	Tokyo (TYO)	2	333,164	19.8	7,501	410	4,283	24
5	Los Angeles (LAX)	2	323,307	19.1	5,083	486	3,533	23
6	Paris (PAR)	4	376,808	18.6	6,314	526	4,528	24
7	Seoul (SEL)	2	241,712	17.8	5,690	299	3,233	22
8	Shanghai (SHA)	2	347,765	16.7	6,924	390	4,368	27
9	Hong Kong (HKG)	1	138,764	15.1	4,572	245	2,535	14
10	Istanbul (IST)	2	365,004	15.0	6,276	353	3,811	30
11	Frankfurt (FRA)	2	221,794	14.8	4,197	250	2,716	19
12	Singapore (SIN)	1	164,862	14.3	4,501	188	2,316	15
13	Chicago (CHI)	2	475,277	14.1	4,949	442	4,173	24
14	Doha (DOH)	1	124,340	14.0	4,569	200	2,287	10
15	Beijing (BJS)	2	333,083	13.2	6,011	365	3,935	25
16	San Francisco (SFO)	1	189,762	11.9	3,112	184	1,906	13
17	Amsterdam (AMS)	1	228,994	11.0	3,251	292	2,708	12
18	Dallas Fort Worth (DFW)	2	469,594	10.9	4,722	456	3,749	30
19	Bangkok (BKK)	2	246,246	10.8	4,740	274	2,918	19
20	Atlanta (ATL)	2	420,658	10.7	4,884	384	3,991	25

About the Airport Tracker:

The Airport Tracker is an online tool that illustrates the emissions of carbon dioxide (CO_2) and local air pollutants generated from passenger, freight and private jet flights departing from 1,300 airports around the world. It is a joint project between ODI Global, T&E and data-providing partner International Council on Clean Transportation (ICCT).

Further information:

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See also:

Steadman, S. and Pickard S. (2026) 'Airports and aviation emissions: the Airport Tracker as a tool for data-driven advocacy'. ODI Global policy brief. London: ODI Global.