

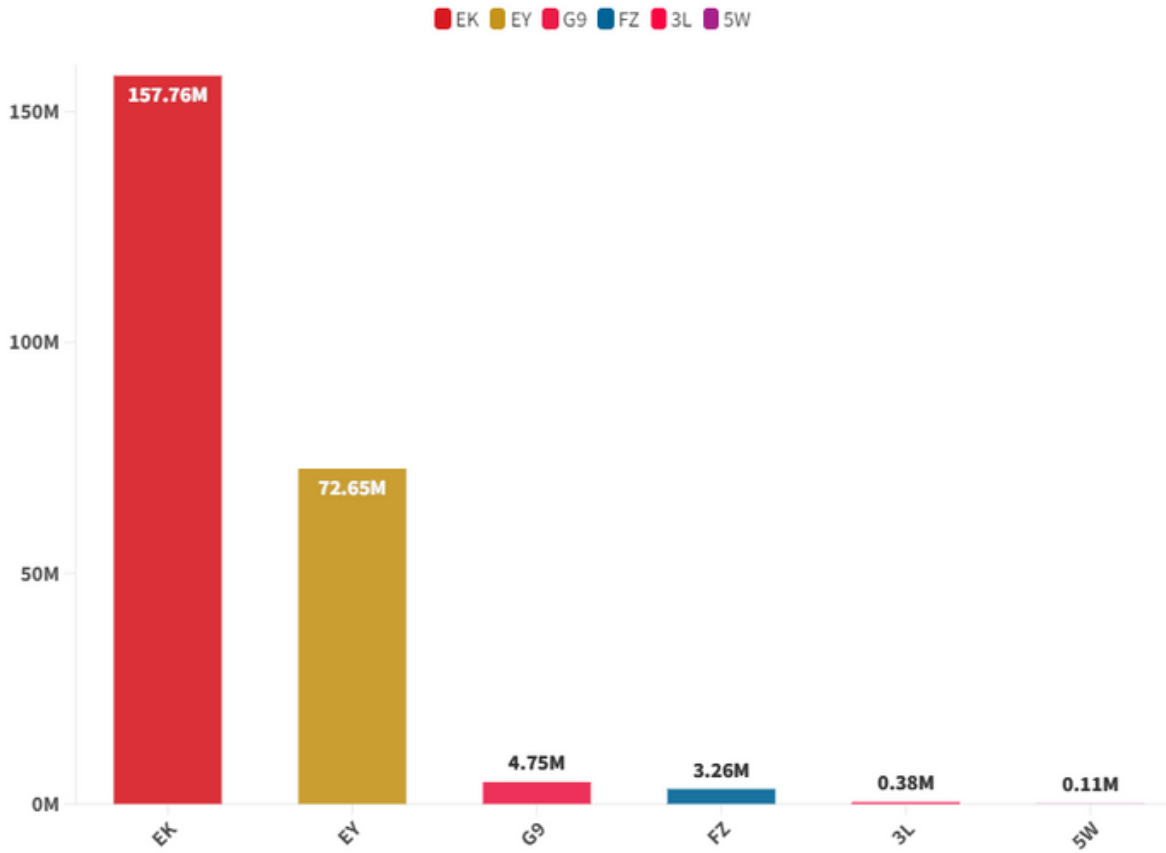
UAE Airlines Emissions Report

Recently hitting an all-time high, greenhouse gas emissions pose a serious threat, escalating global warming. It is no longer a question of whether we should address this issue but how urgently and innovatively we can collectively create solutions. Amid escalating global concerns, the aviation industry has set an ambitious goal to achieve net-zero emissions by 2050. Pursuing net-zero emissions requires rethinking traditional approaches, embracing cleaner technologies, and fostering partnerships to step into the new era of air travel.

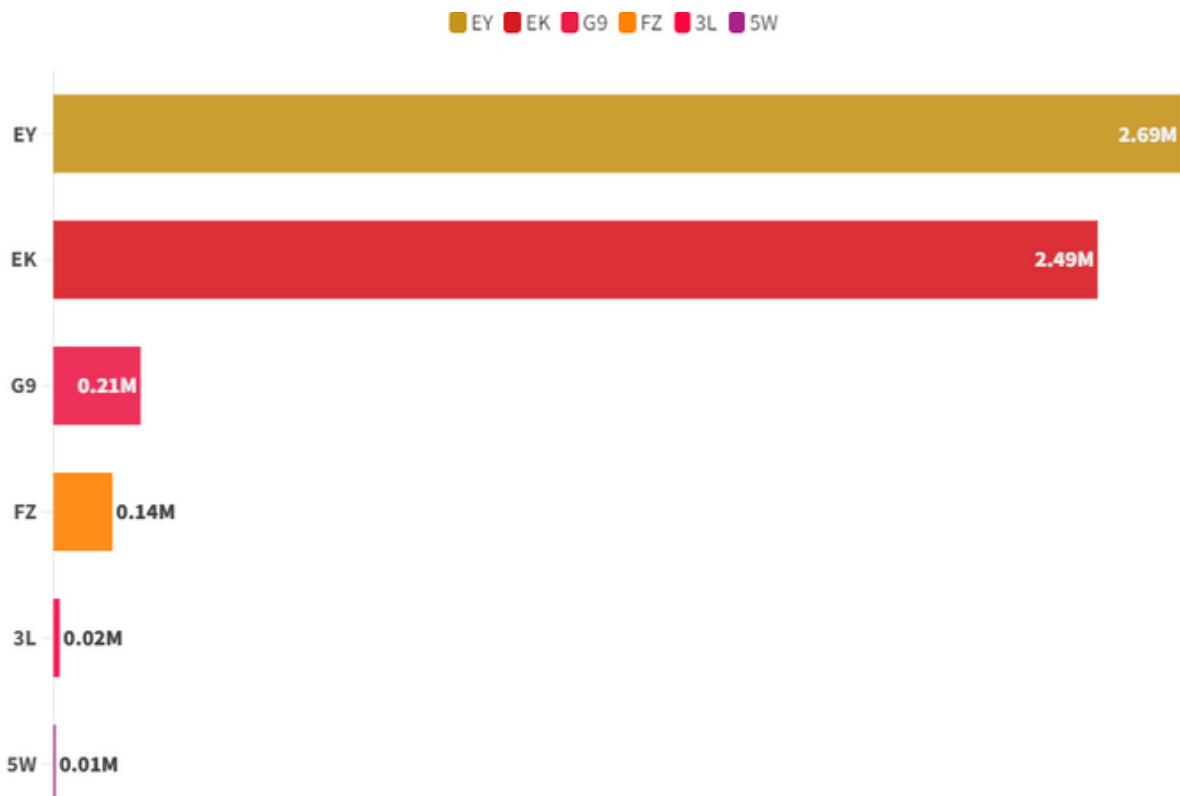
Major airlines in the UAE contribute significantly to overall carbon emissions, with the cumulative impact steadily rising. The UAE ranked as the 5th highest contributor to passenger-related aviation emissions in November 2023, saw an estimated 1.88 million tons of these emissions from its airports during that month. This amount was 3% less than in November 2019 before the pandemic, but it marked an 18% increase compared to November 2022.

Our algorithms and AI-driven tools present a comprehensive overview of the performance of Airlines in the UAE from January 2019 to December 2023, covering aggregate emissions, total flight numbers, and cumulative emissions from diverse aircraft types.

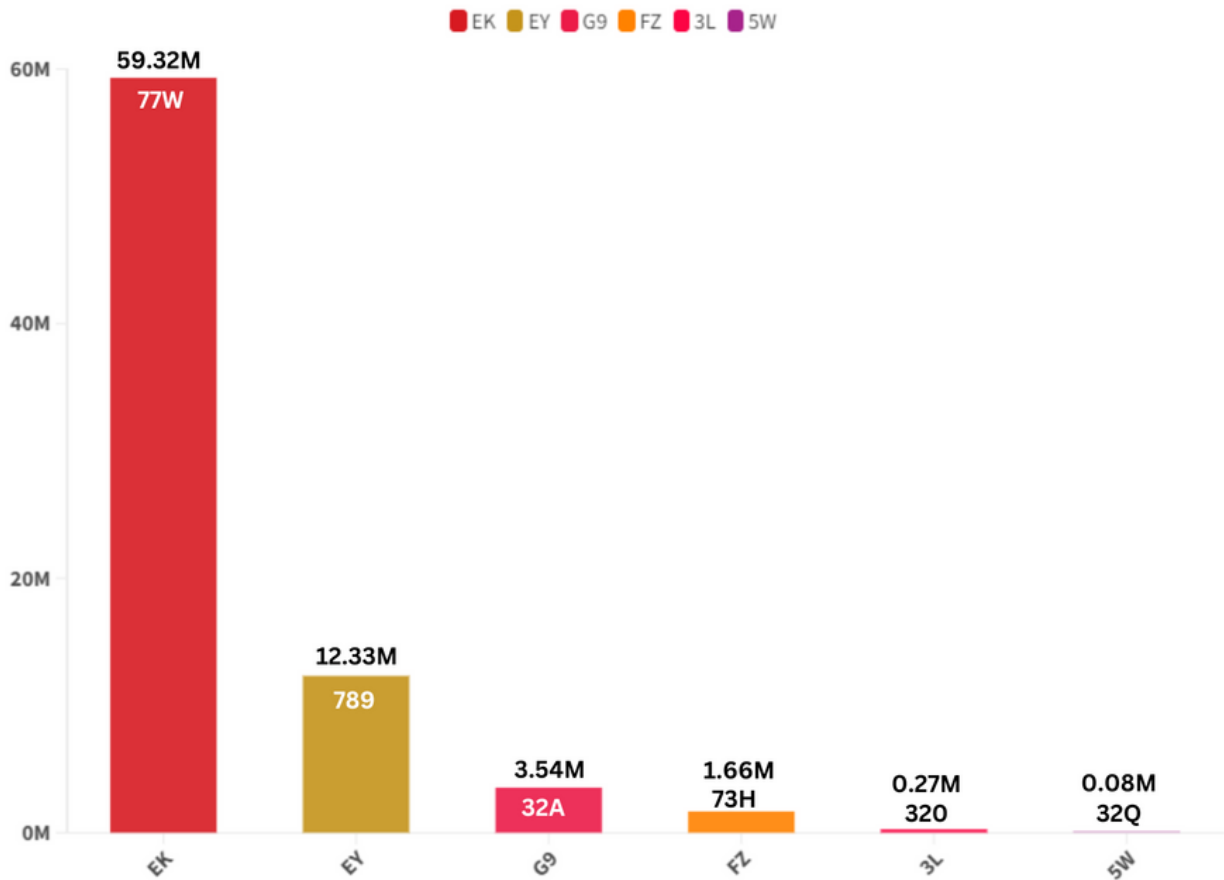
Top 6 Airlines by CO₂ Emissions from Jan 2019 - Dec 2023 (In Million Tons)



Airlines by Total Flight Count from Jan 2019 - Dec 2023 (In Millions)



Top Emissions-Producing Aircraft Types by Airline from Jan 2019 - Dec 2023 (In Million Tons)

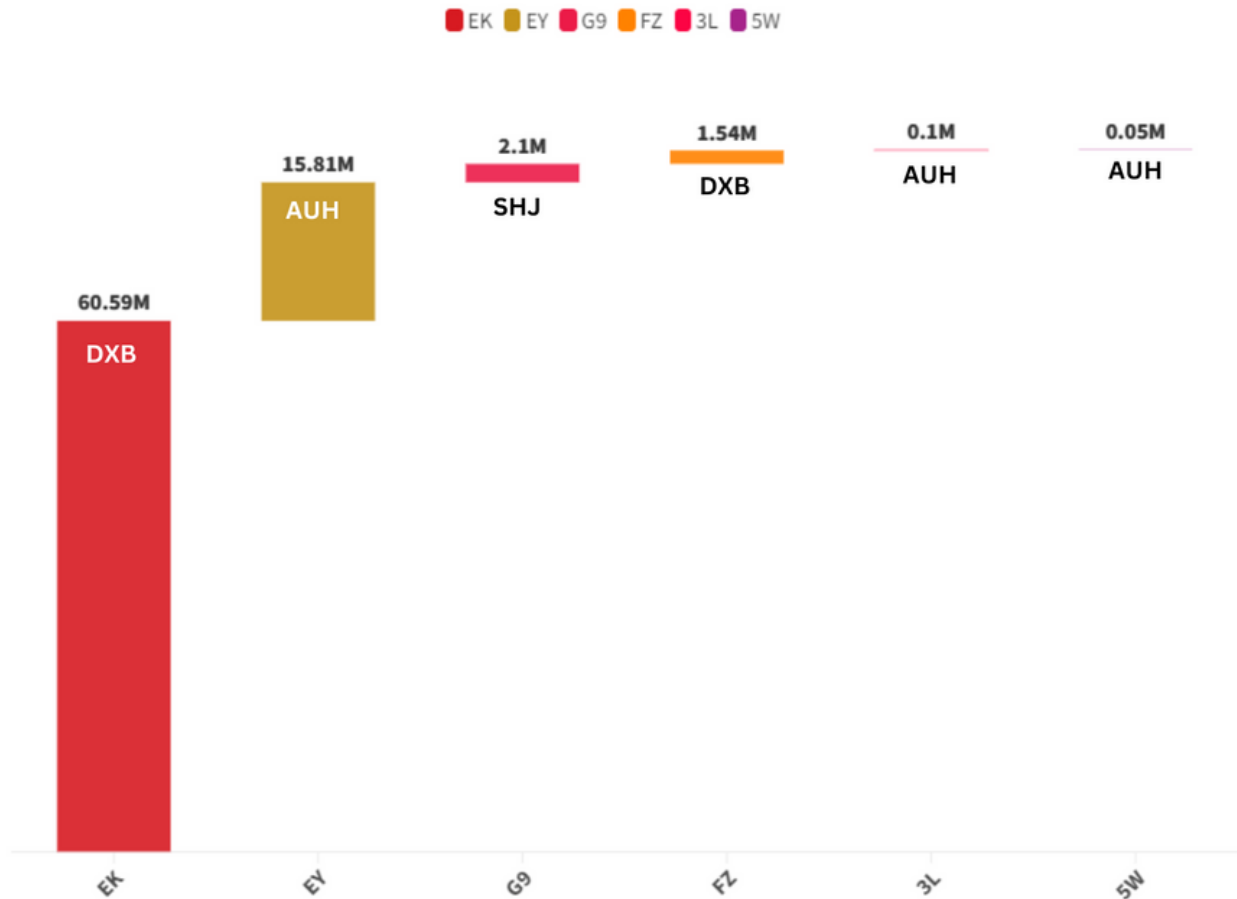


The overview indicates a significant relationship between airlines, aircraft choices, and resultant CO₂ emissions. Specifically, Emirates (EK) and Etihad Airways (EY) are notable contributors, with EK's 77W and EY's 789 aircraft types playing key roles, emphasizing the need for focused strategies to tackle emissions from these Airlines.

Highlighting Emissions Hotspots: Airlines and Their Key Departure Airports

Below is the graph highlighting the key departure airports and their corresponding emissions for each airline.

**Emissions by Airports and Airlines from Jan 2019 - Dec 2023
(In Million Tons)**

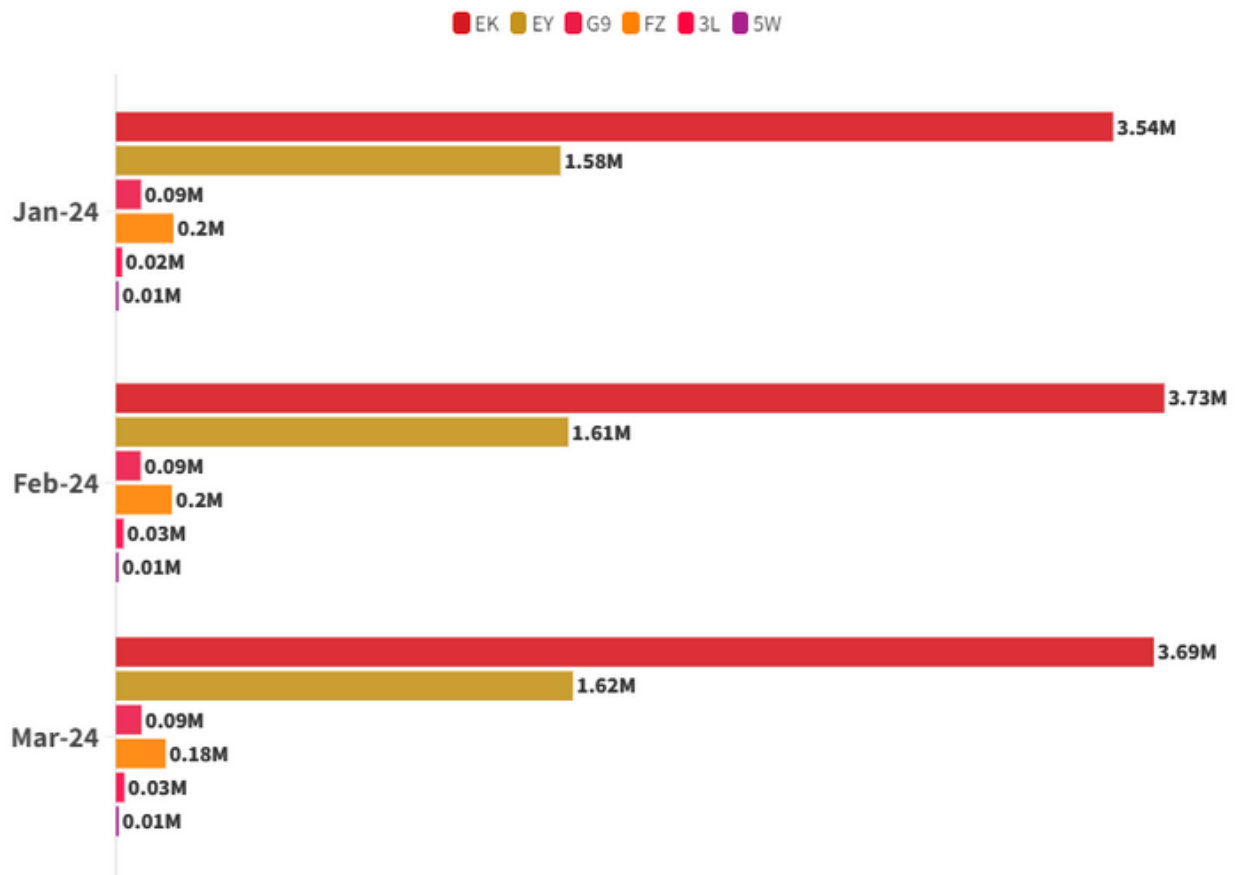


There are variations in emissions hotspots across airlines. Dubai International Airport (DXB) stands out as the leading departure hub, contributing the highest emissions, particularly driven by Emirates (EK). This underscores Dubai International Airport (DXB) as the second busiest international airport in 2023, reinforcing its prominent position in global air traffic.

Airlines Emissions Prediction

The following graph provides a comprehensive insight into the emissions prediction for major airlines in UAE, offering a glimpse into the anticipated carbon footprint from January to March 2024.

**Predicted Emissions for Jan 2024 to Mar 2024
(In Million Tons)**



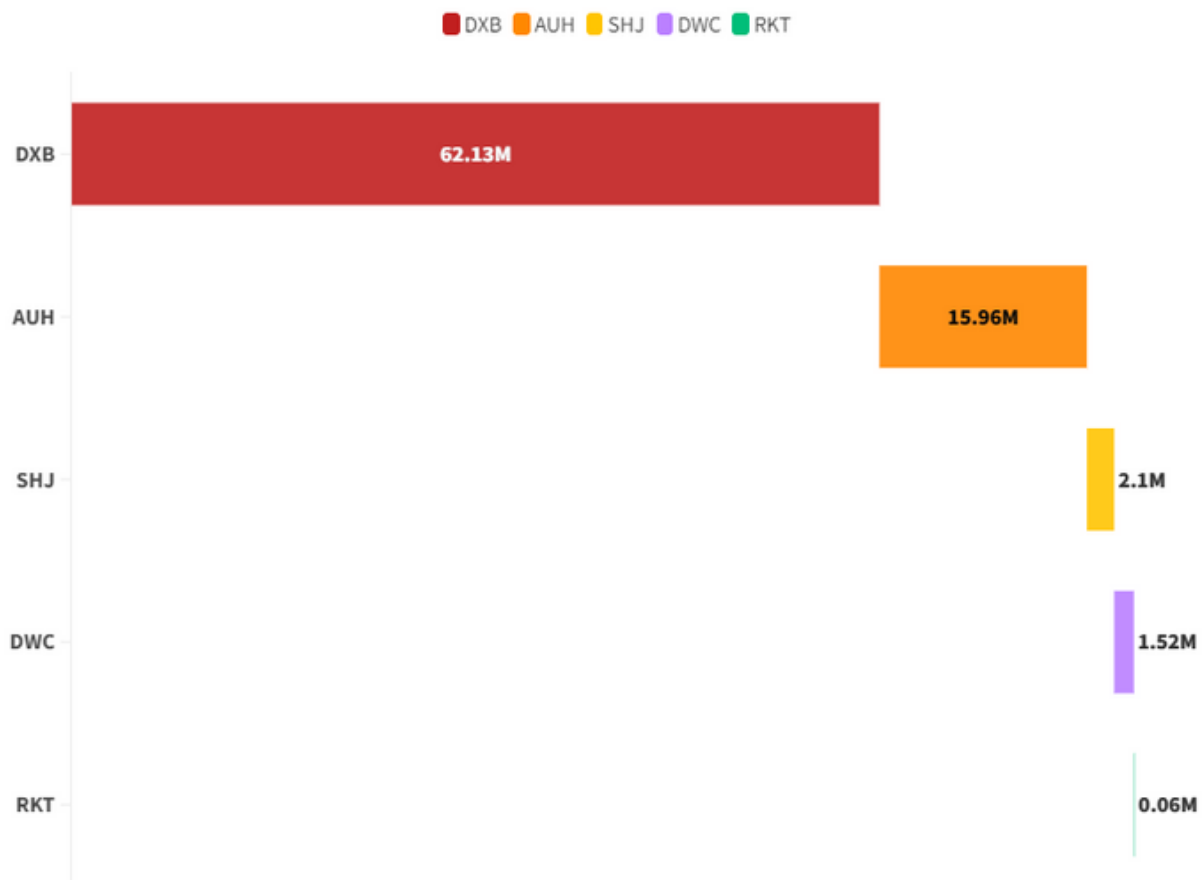
Based on our predicted data, the emissions for Airlines in the UAE are on an upward trajectory. This calls for a heightened focus on implementing and accelerating emissions reduction strategies to address the industry's environmental impact and move towards a more sustainable aviation future.

Airport Emissions in UAE

Airports play an important role in the current landscape of emissions in UAE. To achieve the greater goal of the Aviation industry, to achieve net-zero emissions by 2050, demands a comprehensive transformation of airports, from converting ground fleets to electric vehicles (EVs) and electrifying building systems to on-site renewable energy generation and significant enhancements in energy and water efficiency, including innovative water reuse initiatives.

The current trends in airports' emissions are given below:

**Emissions by UAE Airports- Top 5 from Jan 2019 -Dec 2023
(In Million Tons)**



Emissions by Routes - Top 10 from Jan 2019 - Dec 2023 (In Million Tons)

DEPARTURE AIRPORT	ARRIVAL AIRPORT	ESTIMATED CO ₂ IN MILLION TONS
DXB	JFK	2.47 M
DXB	LHR	2.32 M
LHR	DXB	2.10 M
SYD	DXB	1.57 M
DXB	SYD	1.48 M
JFK	DXB	1.33 M
DXB	LAX	1.32 M
BKK	DXB	1.24 M
MEL	DXB	1.20 M
DXB	CDG	1.14 M

The data illustrates that Dubai International Airport (DXB) is a substantial contributor of CO₂ emissions, with the highest levels in departures. This emphasizes DXB's significant role as a departure hub, underlining its environmental impact. The airport also sees considerable emissions in arrivals, especially in routes connecting DXB to major international destinations such as JFK, LHR, SYD, LAX, BKK, MEL, and CDG. The flights between DXB and JFK contribute significantly to the overall carbon footprint, highlighting the environmental implications of long-haul air travel between major global hubs.

As we witness an unprecedented rise in greenhouse gas emissions and the consequential escalation of global warming, the urgency to act has never been more apparent. Now is the time to accelerate sustainable practices, embrace cleaner technologies, and forge partnerships to mitigate the environmental impact of air travel and secure a healthier future for our planet.