

**GOVERNMENT OF INDIA  
MINISTRY OF CIVIL AVIATION  
LOK SABHA  
UNSTARRED QUESTION NO. : 3173  
(To be answered on the 16<sup>th</sup> December 2021)**

**CARBON FOOTPRINT OF INDIAN AVIATION SECTOR**

**3173. SHRI GIRISH CHANDRA**

**Will the Minister of CIVIL AVIATION**  
नागर विमानन मंत्री

**be pleased to state:-**

(a) whether the Directorate General of Civil Aviation (DGCA) calculates the carbon footprint of the Indian aviation sector on yearly basis and if so, the details thereof for the last twelve years;

(b) the details of the trend of carbon dioxide (CO<sub>2</sub>) emissions during the said period;

(c) whether there is a rise in carbon emissions due to airline operations from Indian destinations and if so, the details thereof; and

(d) the steps taken or being taken by the Government to address this issue?

**ANSWER**

**Minister of State in the Ministry of CIVIL AVIATION**

नागर विमानन मंत्रालय में राज्य मंत्री

**(GEN. (DR) V. K. SINGH (RETD))**

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(a) to (c) Yes Sir. DGCA compiles CO<sub>2</sub> emissions data based on the information received from the Indian scheduled carriers. Details of CO<sub>2</sub> emissions from 2012 may be seen at Annexure. DGCA has started compiling emissions data from 2012 onwards, and hence data relating to the period prior to 2012 is not available.

(d) Steps to address the issue include the following:

(i) Measures taken by airports to reduce carbon footprint include rationalization of operating times/procedures, use of renewable energy, use of alternative fuels in ground handling vehicles, etc.

(ii) Measures taken by airlines to reduce carbon footprint include reduction of

**unwanted weight of aircraft, avoiding moisture/dirt accumulation in aircraft, proper speed and flap management etc.**

**(iii) In addition to the above, Airports Authority of India in consultation with Indian Air Force has optimized airspace utilization under Flexible Use of Airspace (FUA) resulting in reduction of CO2 emission.**

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**Trend of CO<sub>2</sub> Emissions from Indian Aviation Sector**

	CO <sub>2</sub> Emissions in 000 tons (Provisional)								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Indian scheduled passenger airlines to/from domestic destinations</b>	6,135	6,365	6,944	8,194	9,462	11,219	12,307	11,843	6023
<b>Indian scheduled passenger airlines to/from international destinations</b>	5,425	5,585	5,796	6,434	6,923	7,853	8,441	7,057	3194