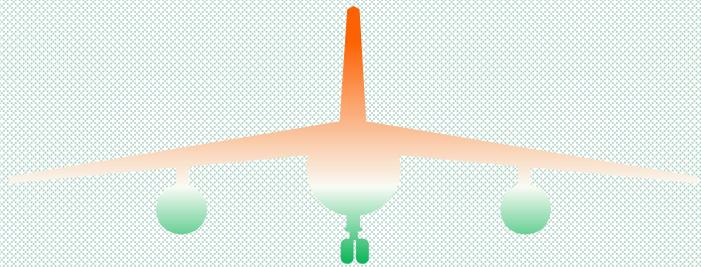
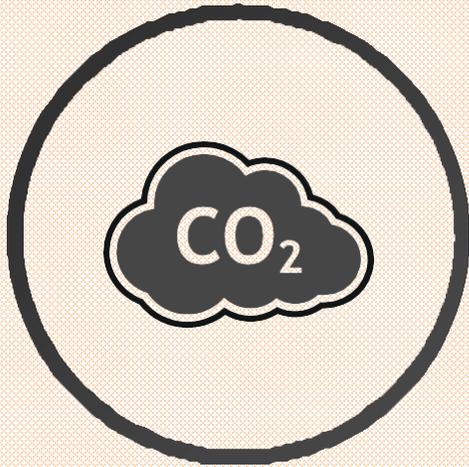


# **CORSIA AND SAF UPDATES IN INDIA**



**DGCA INDIA**  
**20<sup>th</sup> March, 2024**

# Basket of Measures adopted by ICAO as part of long-term strategies for reducing GHGs emissions (International Sector)



Emission Reduction  
through  
technological and  
operational  
advancements

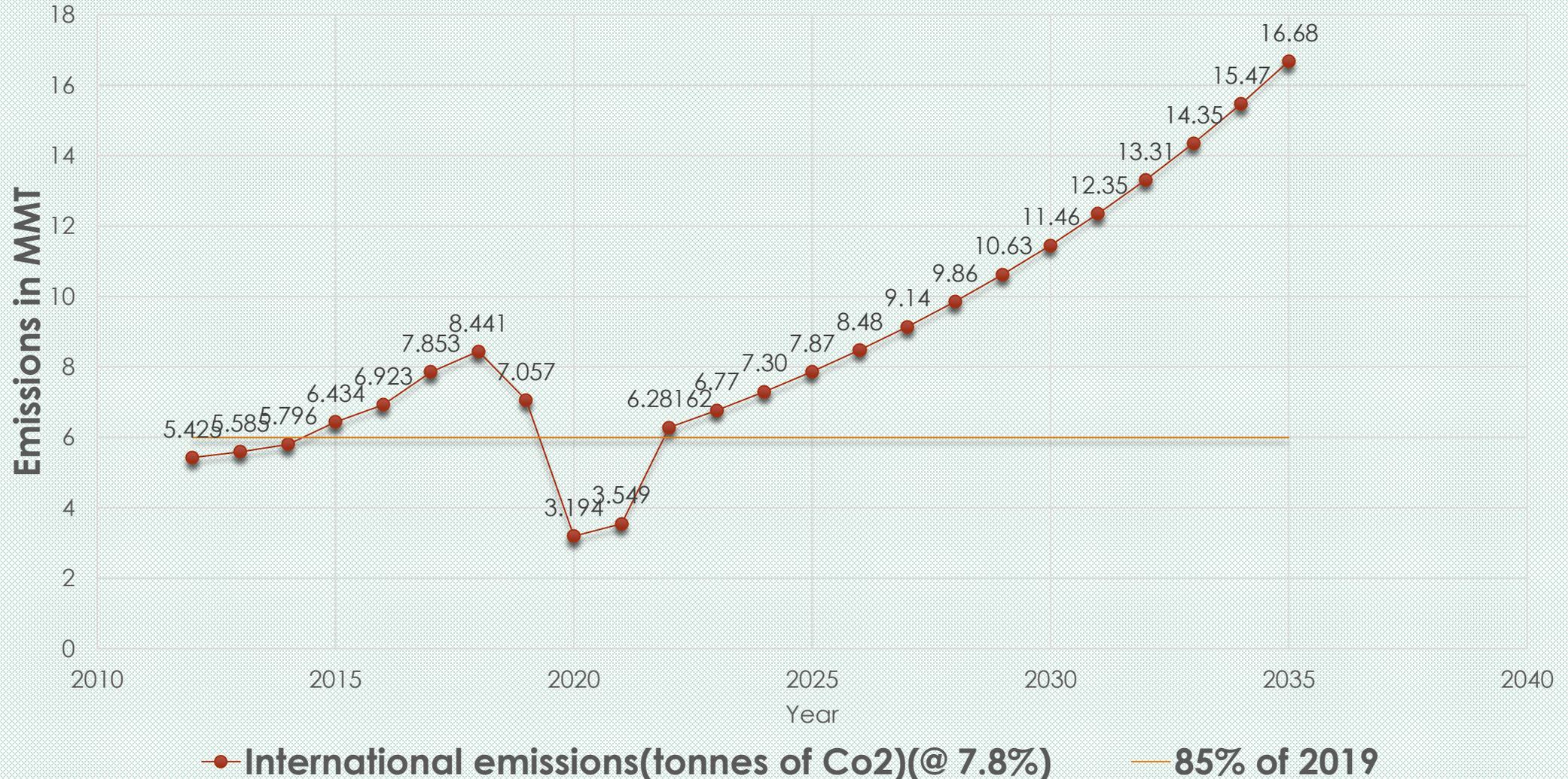


Sustainable Aviation  
Fuels  
Low Carbon Aviation  
Fuels



Offsetting  
through CORSIA

# CORSIA EMISSIONS PROJECTIONS



# CORSIA- INDIAN SCENARIO

- ❑ **No Participation in Voluntary Phases of CORSIA** – As a policy matter, Government has decided not to participate in the voluntary phases of CORSIA,
- ❑ **No Offsetting till 2026** – Indian scheduled operators with international operations (as on 1<sup>st</sup> January, 2019) will not have to pay for their offset requirements till 31<sup>st</sup> December, 2026,
- ❑ **Monitoring & Reporting must under CORSIA** – All Indian scheduled operators with international operations will have to monitor and report the fuel and emissions data to DGCA on yearly basis from 1<sup>st</sup> January, 2019 onwards,
- ❑ **Offsetting under CORSIA** – Will start onwards from year 2027, airlines can either use SAF or offset their emissions by purchasing carbon credits from ICAO approved scheme.

# CORSIA- INDIAN OPERATORS

➤ Indigo



➤ Spicejet



➤ Vistara



➤ Air India



➤ Air India Express



Possible new Entrant:

Akasa Air



# INDIA'S PATH-BREAKING EFFORTS

- ❑ Launched National Regulations on CORSIA in the year 2018.
- ❑ National Accreditation Board for Certification Bodies (NABCB)- Accreditation for CORSIA verification was launched
- ❑ India has its own Two verification bodies accredited with NABCB and empaneled by DGCA.
- ❑ Took initiatives with fuel producers and suppliers for carrying out Biojet Fuel demonstration flights.
- ❑ Worked with airlines to support them in building internal procedures and guiding them throughout the way.
- ❑ Became one of the first few countries to submit the emissions data to ICAO within the timeline.

# SUSTAINABLE AVIATION FUEL : WAY TO NET ZERO

- ❑ MoPNG conducted a meeting on 24/11/2023 with various Ministries and oil companies regarding indicative targets of blending percentage of SAF in ATF, initially for international flights
  
- ❑ The meeting merged on indicative blending percentages of SAF as follows:
  - ❖ 1% by 2027;
  - ❖ 2% by 2028; and
  - ❖ 5 % by 2030

## DEVELOPMENTS MADE: SUSTAINABLE AVIATION FUELS

- India has joined ICAO's ACT-SAF programme wherein assistance, capacity building & necessary trainings are provided.
- Biofuel produced from Jatropha seeds by Indian Institute of Petroleum, CSIR lab – 25% SAF with ATF was blended and used in one engine of Bombardier Q 400 aircraft in August, 2018.
- DGCA has granted approval to one of its airlines to carry out its first international ferry flight with 10% blended fuel from Toulouse to Delhi on 17th Feb 2022.
- M/s Vistara conducted its ferry flight of B-787 from USA to India using 28% of SAF blended fuel on 29<sup>th</sup> March 2023.
- DGCA has granted approval to M/s Air Asia and it carried out its first commercial domestic flight (Pune to Delhi) with 0.75% SAF blended fuel on 19<sup>th</sup> May 2023.
- DGCA has granted approval for Airbus ferry flights to use 5% blended fuel from Toulouse to India.

# BIOFUEL DEMONSTRATION FLIGHTS



# MAJOR CHALLENGES

- Price of SAF
- Finance and Access to Finance
- Harmonized framework for SAF Financing
- Barriers to new Entrants
- Issue of fragmented supply chains and limited feedstock access

## KEYS TO ACCELERATING SAF SUPPLY



Supportive  
government  
policies



Level playing field  
with road  
transport on  
incentives



Access to capital  
for new  
production



R&D to enable cost  
competitiveness &  
supply growth



Collaboration  
amongst all  
stakeholders

# INDIA'S REPRESENTATION AT INTERNATIONAL LEVEL

- ❖ DGCA India is the member to the following working groups of ICAO:
  - Member of ICAO CAEP
  - Member of ICAO WG 4 on "CORSA"™
  - Member of ICAO MDG/FESG WG
  - Member of TAB Committee
  - Member of LMR (Long Term Aspirational Goal- Monitoring and Reporting Group)

# THE WAY FORWARD - FUTURE

- ❑ Production and Certification of CORSIA Eligible Fuels
- ❑ CORSIA Eligible Emissions Units – Development through Indian Carbon Markets
- ❑ More Verification/Certification Bodies both for CORSIA MRV and certifying CORSIA Eligible Fuels
- ❑ Explore possibility of LCAF potential in India

