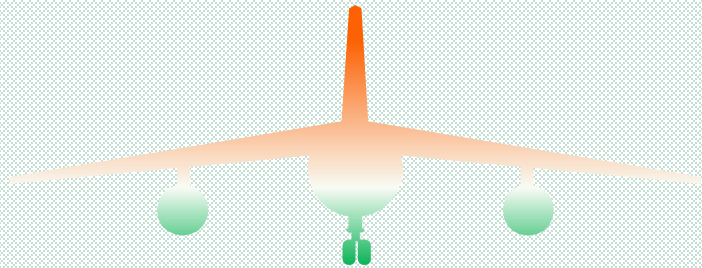
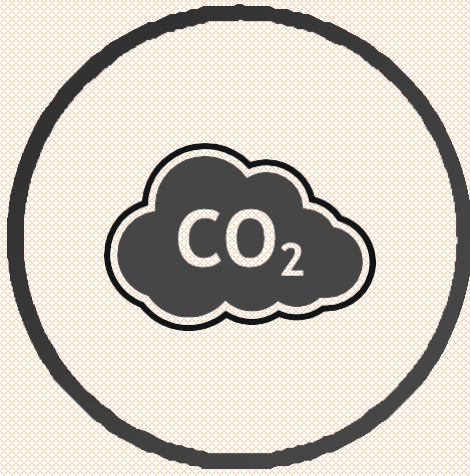


CORSIA AND SAF UPDATES IN INDIA



DGCA INDIA
20th 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

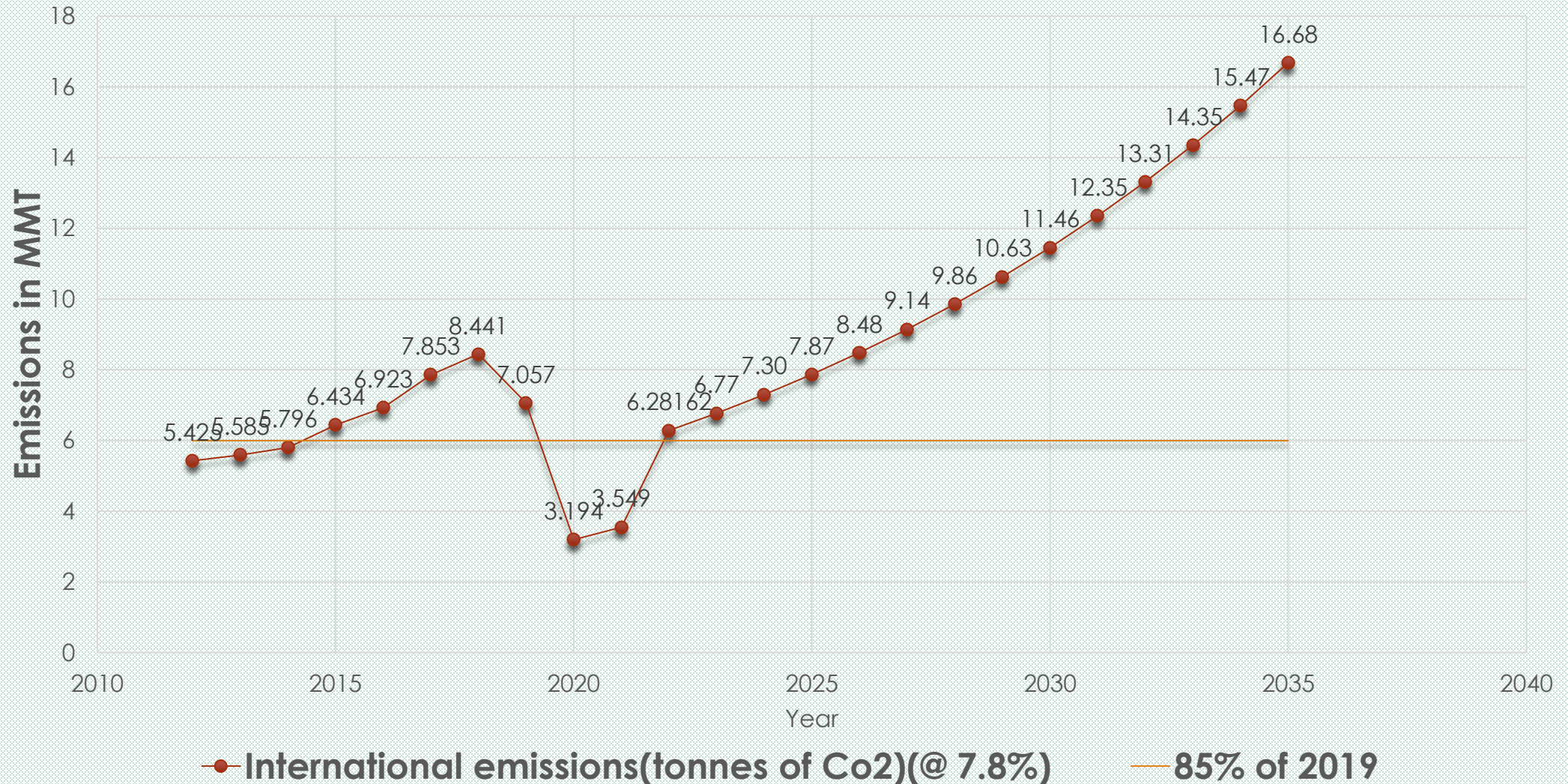


Sustainable Aviation
Fuels
Low Carbon Aviation
Fuels



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 1st January, 2019) will not have to pay for their offset requirements till 31st 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 1st 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 29th 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 19th 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 "CORSIA"
 - 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

