



Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) – Overview

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NBAA – BACE October 2018

- CORSIA – Brief History
- CORSIA in context
- Key dates for CORSIA
- Am I included?
- What do I need to do?
- What assistance is there?

- 2013 – the 38th ICAO Assembly adopted Resolution A38-18 to develop a global MBM
- 2016 – the 39th ICAO Assembly – draft text under Resolution 39-3 adopted by the Assembly
- Adoption created a pathway toward the development of:
 - Standards and Recommended Practices (SARPs) in a new chapter of Annex 16 (Vol IV),
 - monitoring, reporting, and verification (MRV)
 - and emissions unit criteria (EUC)
 - Sustainable aviation fuels sustainability criteria
- 2018 (June) – ICAO Council adopted first edition of Annex 16, Vol. IV - CORSIA

CORSIA in Context

- The Business Aviation Commitment on Climate Change (BACCC) was developed and published in **November 2009**
- 3 goals
- 4 key pathways towards **achieving its goals**
- Guides and is a **foundation for all environment/sustainability activity** within the business aviation sector
- Identified **market based measures** as a key contributor to emissions reductions as part of the commitment

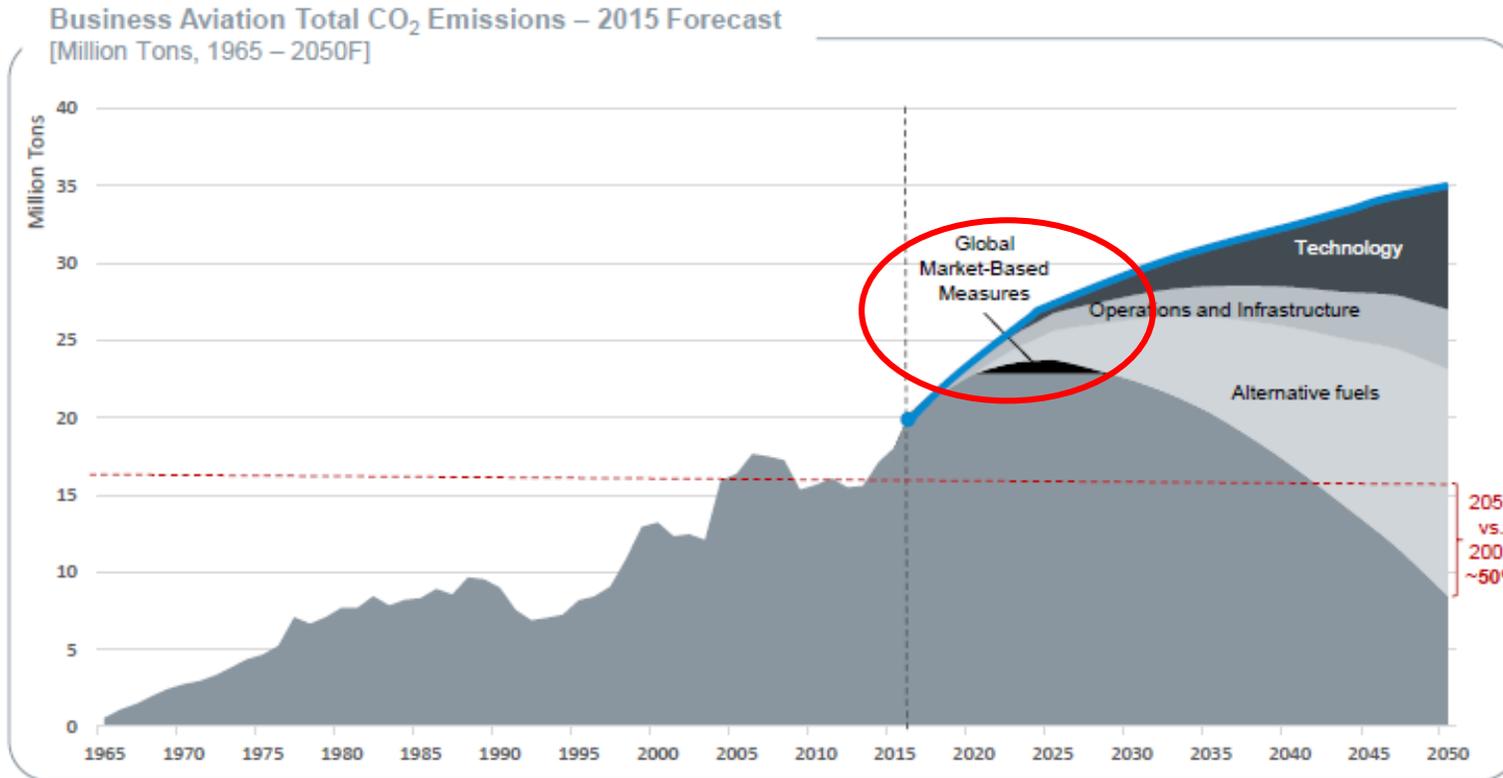


MBMs in Context with the BACCC

Goal 1
Improving fuel efficiency 2% per year from 2010 until 2020

Goal 2
Achieving carbon-neutral growth from 2020

Goal 3
Halving total CO₂ emissions by 2050 relative to 2005



Invest in new **TECHNOLOGY**
(including sustainable aviation biofuels)

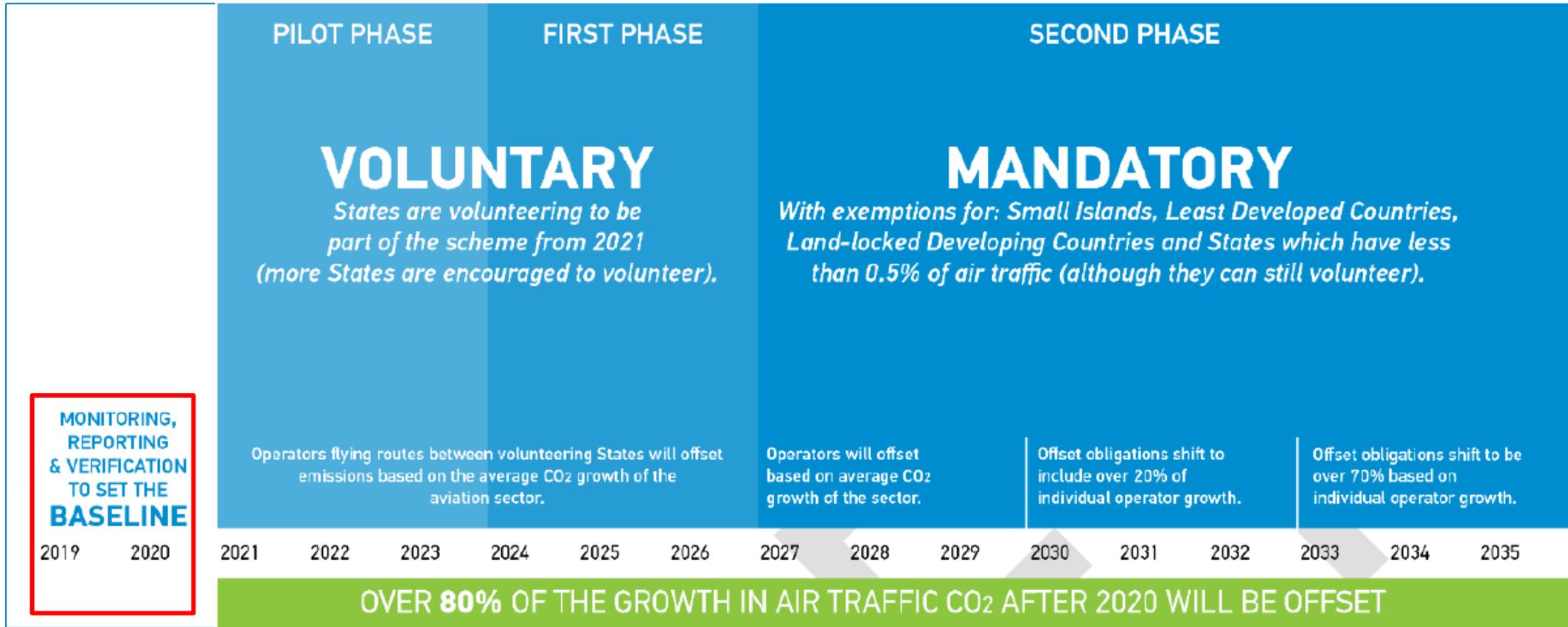
Fly using more efficient **OPERATIONS**

Build and use efficient **INFRASTRUCTURE**

Use effective, global, **MARKET-BASED MEASURES**

Offsetting is not a “licence to pollute”. Rather, it is part of the “basket of measures” for overall emissions reductions and compensates for the other three elements until they have their intended effects in reducing CO₂ levels, as described in the BACCC.

CORSIA Key Dates



An Emissions Monitoring Plan (EMP) that will detail how you will monitor and report your emissions will be due by all impacted operators to their Administering Authority by 28th February 2019 towards establishing baseline

- The CORSIA will be applied to international aviation in several phases:
 - By 28 February 2019 – Aeroplane operators should **submit MRV plan** to the State Administering Authority
 - 2019 to 2020 – establishment of **baseline CO₂ emissions** (*will apply to all operators carrying out international flights not under exemption*)
 - 2021 to 2023 – a **‘pilot’ voluntary phase** of the 73 countries that have chosen to participate.
 - 2024 to 2026 – **first implementation phase** (same group)
 - 2027 to 2035 – the **second phase** (all States with more than 1% of international RTKs)
- CORSIA will apply to **international flights** between the participating countries only. Domestic flights *will not* be covered by CORSIA.

- CORSIA, a market based measure, will be a **simple offsetting scheme** (as opposed to the EU ETS, which is “cap and trade”)
- The purchase of offsets will be required against **growth emissions related to fuel burn** above a 2019/2020 baseline for international operations only (as per previous slide).
- For **each unit of fuel used, 3.16 units of carbon are produced**
- Offsets will be required for any **emissions growth above the baseline** (established 2019/2020) – this will be initially calculated by ICAO for each operator across the civil aviation sector

Am I Included in CORSIA?

- **All operators** must report emissions from **international flights annually**.
 - During the baseline, all operators not excluded by exemption must submit an MRV
 - During the “Pilot Phase”, only operations in “volunteer states” must report
 - *NOTE – exemptions are based on routes, NOT operator nationality*
- **Technical exemptions** from offsetting requirement:
 - Operators with **fewer than 10,000 tonnes of CO₂** emissions in flights covered by the scheme
 - Aircraft of **less than 5,700kg MTOW**
 - **Humanitarian assistance flights**, firefighting etc.
- **It is recommended** that operators near the 10,000 tonnes of CO₂ threshold in any given year **should engage with their Administering Authority (FAA)** for guidance on what to do.

Who is the operator?

- Operator: Person, organization, or enterprise engaged in or offering to engage in an aircraft operation.
- Identified in Item 7 of International Flight Plan
 - ICAO Designator
 - AOC reference or Registration Number
- Treatment or segmentation of aircraft operator may be complicated
 - Private operation
 - Managed aircraft – with or without AOC
 - Fractional & joint/shared ownership
 - AOC – 135 On-Demand Charter
- Ultimately will depend on implementation by and guidance from administering authority.

Illustrative Annual CO₂ Emissions*



Aircraft Type	@ 400 Hrs/Yr	@ 900 Hrs/Yr
	Tonnes of CO ₂	Tonnes of CO ₂
ACJ 319	2857	6429
BBJ 737	2920	6569
Bombardier 605	1270	2857
Bombardier Global Express	2051	4615
Cessna Mustang	348	783
Cessna Sovereign	1081	2432
Embraer 100	421	947
Embraer 300	672	1513
Falcon 2000LXS	1081	2432
Falcon 7X	1481	3333
Gulfstream G450	2000	4500
Gulfstream G550	1739	3913
Gulfstream G650	1932	4348

Another secondary method of quick calculation as to whether or not you might be included in CORSIA is if you use more than 1 million (US) gallons of fuel for your fleet for international operations per year

Based on average seating, stage length of 600NM

*These figures are for illustrative purposes only and may vary from flight to flight

Also available on the IBAC CORSIA Webpage

What do I need to do?

- If you are not subject to exemption, you will need to **engage with your state of registration** and their appointed **Administrative Authority (US – FAA)**.
- If your state of registration is one of the states that has volunteered for the scheme (currently 73 States to date) and your operations are not exempt, **you will be included**.
 - *NOTE – exemptions are based on routes, NOT operator nationality*
- You will need to submit an **Emissions Monitoring Plan** (how you will monitor & report your emissions) to your state of registration by **28th February 2019**.
 - *It is recommended that you submit as early as possible as the scheme starts 01/01/2019*
- **Engage a verifier** who will assess your MRV and emissions accounting practices.
 - Engaged verifier must be accredited to a national standards authority

What Assistance is There to Help Me?

- There will be a specific section of the ICAO website dedicated to CORSIA that will have tools, tutorials and videos available to assist operators
- ICAO is assisting and reducing the administrative burden for operators with the development and publication of the ***CO₂ Estimation and Reporting Tool (CERT)***;
 - It will be based on great circle distance (GCD) or block fuel
 - This tool is free and available from the **ICAO CORSIA website**.
 - Once all flights are entered into the CERT, it will automatically determine which of these are part of CORSIA and **calculate total covered emissions**.
- There are also be an **Emissions Monitoring Plan** and **Emissions Report** templates available (with guidance on how to complete the EMP to follow in the coming weeks)

Communications on CORSIA

- IBAC has developed a **“Countdown to CORSIA” information card** dedicated to business aviation operators, which will help to prepare operators on what to do now
 - Available at IBAC attended industry events and published on the IBAC Web site (see following slide)
- The Air Transport Action Group (ATAG) has developed **excellent CORSIA related material**
 - IBAC and its members have access to this material.
 - Excellent Q&A section
 - Can be accessed via the IBAC CORSIA Web page.
- ICAO CORSIA website (as previously mentioned)



Countdown to CORSIA Webpage



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The ICAO Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

The global aviation industry has taken leadership on climate change, with a robust plan to reduce emissions based on a comprehensive set of goals. After 2020, technological, infrastructure, and operational efficiency measures will be complemented by the ICAO Carbon Offsetting and Reduction Scheme for International Aviation – better known as “CORSIA”.

The CORSIA will help industry meet its goal of carbon neutral growth from 2020 in support of the [Business Aviation Commitment on Climate Change](#). Basically, aircraft operators whose operations are covered will offset the growth in their carbon emissions in international flying on an annual basis from a

Newsletters

- [IBAC Update](#)
- [IS-BAH Programme Update](#)
- [IS-BAO Programme Update](#)

IBAC Welcomes Global Carbon-offsetting Scheme for International Aviation

[Read the press release here.](#)

[Click here for more CORSIA info](#)

[CORSIA Workshops](#)

IBAC Learning Events

- [IS-BAH Workshops: Madrid, Spain](#)
January 18, 2018, 8:00 am - January 19, 2018, 4:00 pm
- [IS-BAH Workshops: West Palm Beach, FL USA](#)

<http://www.ibac.org/business-aviation-and-the-environment/corsia>

CORSIA-dedicated email address: corsia@ibac.org. Central mailing for queries and updates – register now!

Recap – Key Takeaways

- Check for your inclusion in CORSIA through exemptions
- EMP to be submitted by 28th February 2019 (recommended to submit earlier and in time for scheme starting date of 01/01/2019)
- Engage with your Administering Authority
- Engage verifier
- Participate in “Baseline” during 2019/2020 (all international operations)
- You might also want to consider;
 - Designating a **focal point** for CORSIA
 - Create a corsia@xxxxx.com etc. for communication with AA’s
 - Mapping existing **monitoring systems** (fuel, ETS, etc.)
 - If you are you eligible for **simplified procedures?**

Thank you!

Q & A

