

EU CORSIA Africa and Caribbean

CORSIA Key elements, Offsetting and CORSIA eligible emissions units

Capacity building session for stakeholders from Namibia

Working for quieter and cleaner aviation.

22.07.2024 and 26.07.2024

Your safety is our mission.



This project is funded by the European Union
and implemented by EASA

Overview of Offsetting Requirements

Your safety is our mission.

An Agency of the European Union 

CORSIA

CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation) is a global market-based mechanism developed by the International Civil Aviation Organization (ICAO) designed to address the environmental impact of carbon emissions from international civil aviation.



Monitoring

Monitoring plan for emissions
reduction achieved

Reporting

Submission of
emission report

Verification

Verification of the
reduced emissions

Offsetting

Compensation of
exceeded emissions

CORSIA Main Obligations

CORSIA sets up two kinds of main obligations, with different timetables but strongly related and interdependent

MRV

From
2019

Offsetting

From
2021

CORSIA MRV from 2019

→ Every year until the end of the mechanism (2035)

CORSIA	
EMISSIONS MONITORING PLAN (EMP)	
CONTENTS	
1 Version control of Emissions Monitoring Plan	
2 Aeroplane operator identification and description of activities	
3 Fleet and operations data	
4 Methods and means for calculating emissions	
4.1 Fuel Use Monitoring Method: Method A	
4.2 Fuel Use Monitoring Method: Method B	
4.3 Fuel Use Monitoring Method: Block-off / Block-on	
4.4 Fuel Use Monitoring Method: Fuel Uplift	
4.5 Fuel Use Monitoring Method: Fuel Allocation with Block Hour	
4.6 ICAO CORSIA CO₂ Estimation and Reporting Tool (CERT)	
5 Data management, data flow, control system, risk analysis and data gaps	
Template Information	
Template provided by:	
Version (publication date):	
<small>Note: For the purpose of this template, international flight is defined as in Annex 16, Volume IV, Part II, Chapter 1, 1.1.2, and Chapter 2, 2.1.</small>	

CORSIA	
EMISSIONS REPORT (ER)	
CONTENTS	
1 Aeroplane operator identification and description of activities	
2 Underlying basic information of the Emissions Report	
3 Aeroplane fleet and fuel types	
4 Fuel density	
5. Reporting	
5.1 Reporting - State pairs	
5.2 Reporting - Aerodrome pairs	
6 Data gaps	
Template Information	
Template provided by:	
Version (publication date):	
<small>Note: For the purpose of this template, international flight is defined as in Annex 16, Volume IV, Part II, Chapter 1, 1.1.2, and Chapter 2, 2.1.</small>	

CORSIA	
Verification Report	
CONTENTS	
Scope of Verification Report	
Identification	
Time allocation and scope of the verification	
General information	
Process and analysis	
Conclusions	
Concluding verification opinion	
Optional information	
Template Information	
Template provided by:	
Version (publication date):	

MRV actions:who, what, when, how

ACTION	WHO	WHAT	WHEN	HOW
MONITORING	OPERATOR	CO2 emissions	Continuously	Emissions Monitoring Plan
REPORTING	OPERATOR to SA	CO2 emissions	Annually	Emissions Report to SA
	STATE to ICAO	CO2 emissions	Annually	Through CCR to ICAO
VERIFICATION	OPERATOR	CO2 emissions	Annually	Pre-verification (recommended)
	VERIFIER	CO2 emissions	Annually	Verification Report
	STATE	CO2 emissions	Annually	Magnitude Check

CORSIA Offsetting from 2021

5.1 REPORTING - STATE PAIRS

Explanation: Please complete the list underneath. All State pairs operated during the reporting year have to be reported.

Note I: Please report both directions between State pairs if applicable (A-B and B-A).

Note II: If you used different type of fuels on the same State pair with different fuel conversion factors, you need to create an identical State pair and report this portion of fuel separately. Please note, emissions from CORSIA eligible fuels are calculated with the fuel conversion factor(s) from corresponding aviation fuels.

Note III: Please also complete the CORSIA eligible fuels supplementary information to the Emissions Report, if CORSIA eligible fuels were used during the reporting period.

New from 2021
Emissions

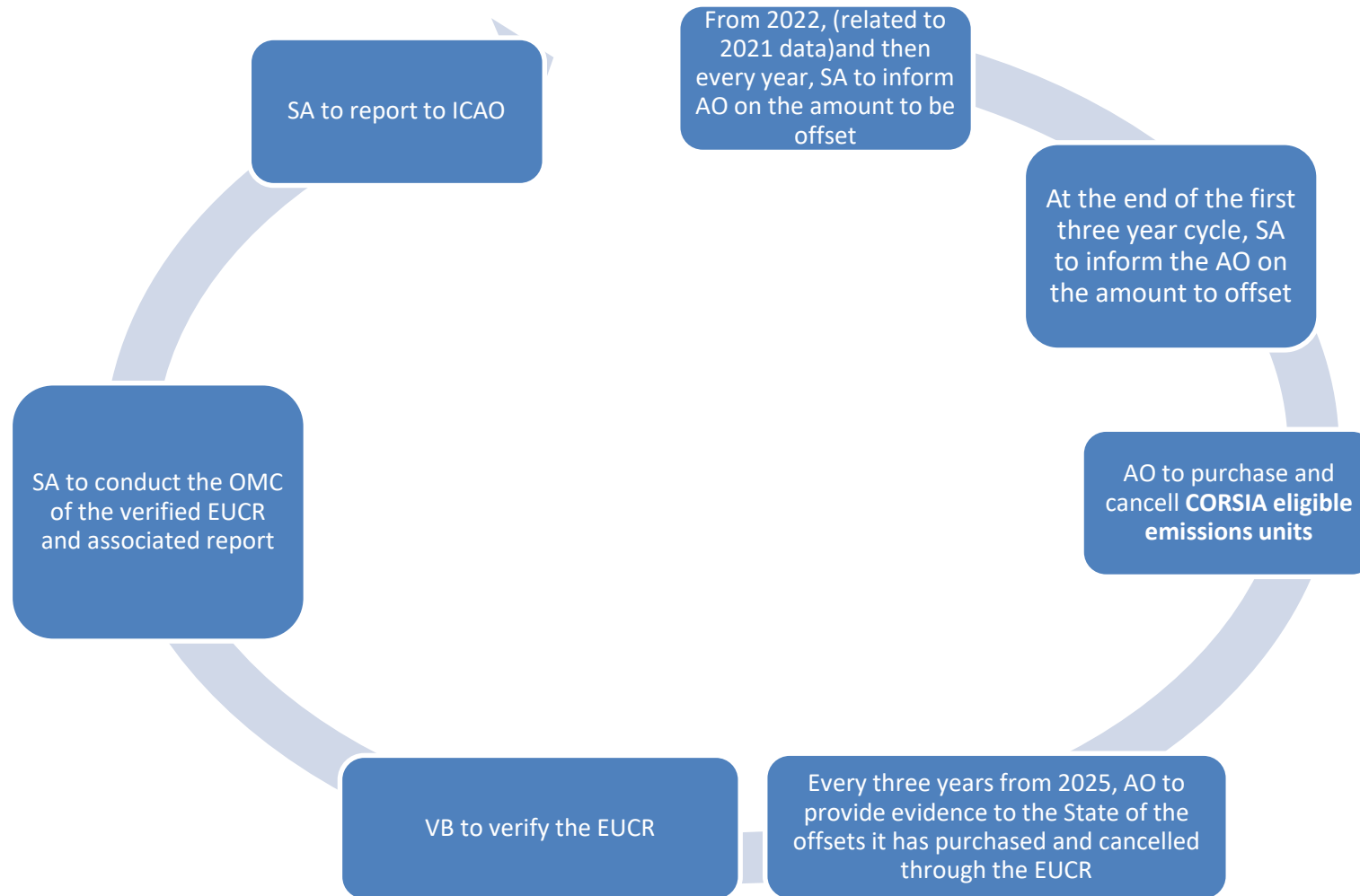
a) Summary of reported international flights and emissions

Total CO ₂ emissions from international flights (in tonnes):	
Total CO ₂ emissions from flights subject to offsetting requirements (in tonnes):	
Total number of international flights during reporting period:	
Total number of international flights subject to offsetting requirements:	
Total emissions reductions claimed from the use of CORSIA eligible fuels (in tonnes):	

Who has to offset under CORSIA?

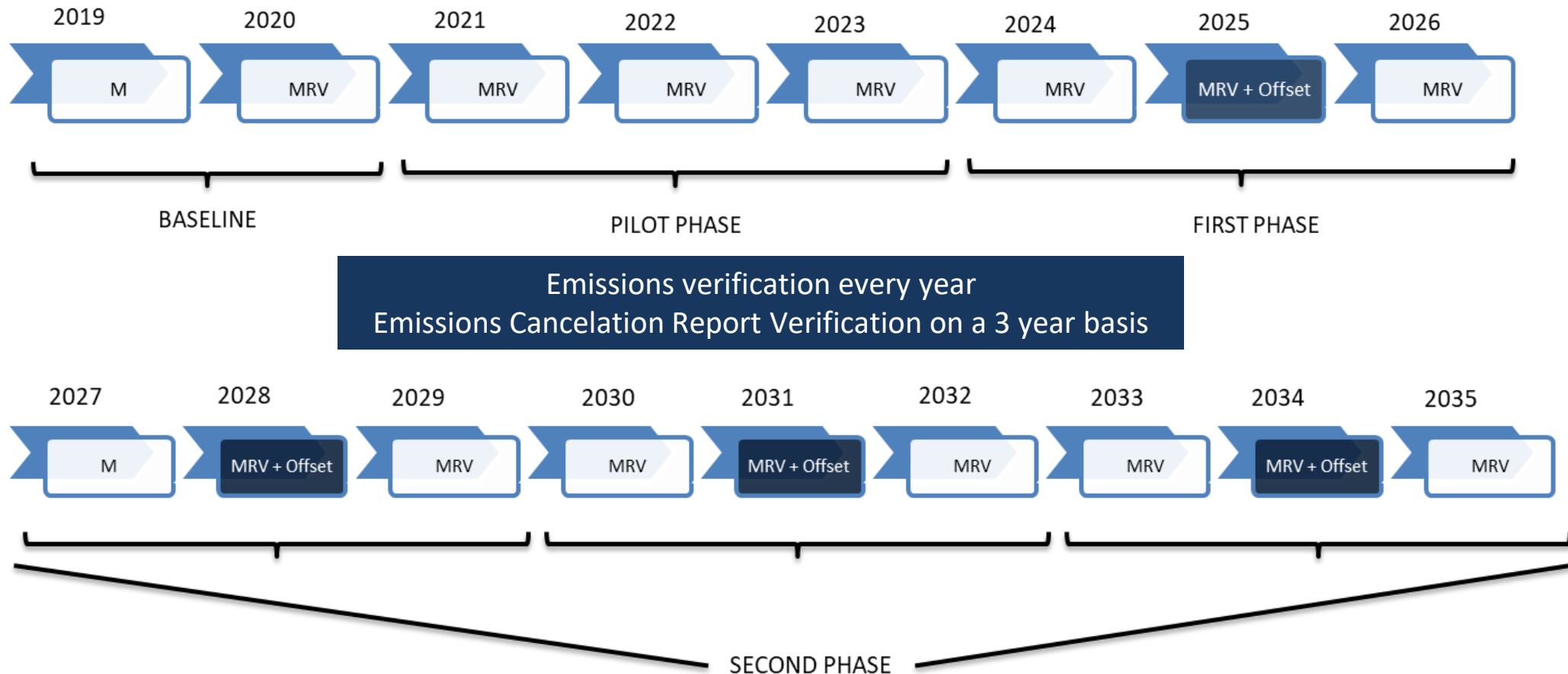
AEROPLANE Operators attributed to the state based on the value the SA informed them

Offsetting actions: who, what, when



MRV and offsetting in the calendar

- Monitoring, Reporting and Verification (MRV) on an annual basis
- Offsetting requirements on a **three-year basis**



CORSIA Offsetting after ICAO A41

HOW TO CALCULATE CO₂ OFFSETTING REQUIREMENTS?

Operator's Annual
CO₂ Offsetting
Requirements

=

Operator's Annual CO₂
Emissions subject to
Offsetting Requirements

×

Growth
Factor *

ICAO SECTOR
GROWTH FACTOR

* The Growth Factor changes every year taking into account the annual Sector's Growth Factor, which is calculated by ICAO, and (for 2033-2035) the individual operator's growth factor as shown below.

100%
Sectoral

2021-2023

100%
Sectoral

2024-2026

100%
Sectoral

2027-2029

100%
Sectoral

2030-2032

15%
Individual

85%
Sectoral

2033-2035

SA from the verified ER,
second line

2021 SGF from the CCR, October 2022 - 88 states -

Total 2021 CO ₂ emissions for all State pairs subject to offsetting requirements (SE_y)	167,142,002 ^a
Total 2019 CO ₂ emissions for all State pairs subject to offsetting requirements in the year 2021 ($SE_{B,y}$)	341,380,188 ^a
2021 Sector's Growth Factor (SGF_y)	0.0 ^b

$$SGF_y = \frac{(SE_y - SE_{B,y})}{SE_y}$$

Applying the formula for offsetting

From the 2021 ER of the AO

a) Summary of reported international flights and emissions

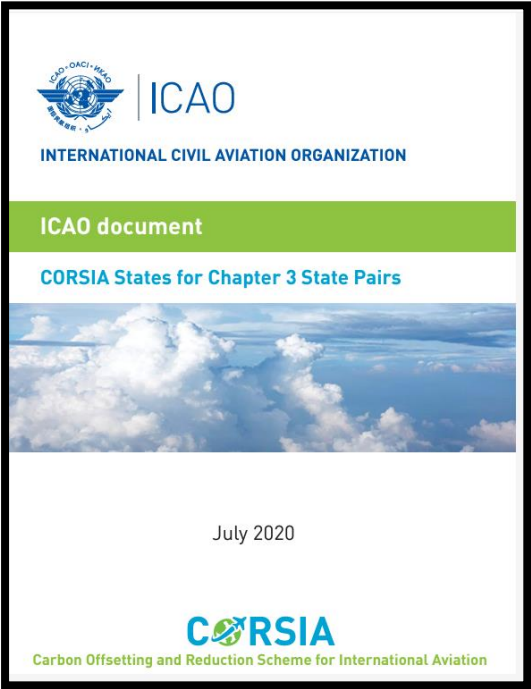
Total CO ₂ emissions from international flights (in tonnes):	10.591
Total CO ₂ emissions from flights subject to offsetting requirements (in tonnes):	8.797
Total number of international flights during reporting period:	530
Total number of international flights subject to offsetting requirements:	370
Total emissions reductions claimed from the use of CORSIA eligible fuels (in tonnes):	



2021 Sector's Growth Factor (SGF_T)	0.0 ^b
---	------------------

AO annual offsetting requirements = $8797 \times 0 = 0$ offsett

As reflected in Doc. “CORSIA States for Chapter 3 State Pairs”. 88 State joint CORSIA from 01.01.2021



ICAO document — CORSIA States for Chapter 3 State Pairs

CORSIA States for Chapter 3 State Pairs

The following 88 States will participate in CORSIA from 1 January 2021:

Afghanistan	Israel
Albania	Italy
Armenia	Jamaica
Australia	Japan
Austria	Kazakhstan
Azerbaijan	Kenya
Belgium	Latvia
Benin	Lithuania
Bosnia and Herzegovina	Luxembourg
Botswana	Madagascar
Bulgaria	Malaysia
Burkina Faso	Malta
Cameroon	Marshall Islands
Canada	Mexico
Costa Rica	Monaco
Côte d'Ivoire	Montenegro
Croatia	Namibia
Cyprus	Netherlands
Czechia	New Zealand
Democratic Republic of the Congo	Nigeria
Denmark	North Macedonia
Dominican Republic	Norway
El Salvador	Papua New Guinea
Equatorial Guinea	Philippines
Estonia	Poland
Finland	Portugal
France	Qatar
Gabon	Republic of Korea
Georgia	Republic of Moldova
Germany	Romania
Ghana	Rwanda
Greece	San Marino
Guatemala	Saudi Arabia
Guyana	Serbia
Honduras	Singapore
Hungary	Slovakia
Iceland	Slovenia
Indonesia	Spain
Ireland	Sweden

2

ICAO document — CORSIA States for Chapter 3 State Pairs

Switzerland	United Arab Emirates
Thailand	United Kingdom
Turkey	United Republic of Tanzania
Uganda	United States
Ukraine	Zambia

– END –

3

2022 SGF from the CCR, October 2023 - 107 States -

Total 2022 CO ₂ emissions for all State pairs subject to offsetting requirements (SE_y)	272,384,139 ^a
Total 2019 CO ₂ emissions for all State pairs subject to offsetting requirements in the year 2022 ($SE_{B,y}$)	346,755,570 ^a
2022 Sector's Growth Factor (SGF_y)	0.0 ^b

$$SGF_y = \frac{(SE_y - SE_{B,y})}{SE_y}$$

Applying the formula for offsetting

From the 2022 ER of the AO

a) Summary of reported international flights and emissions

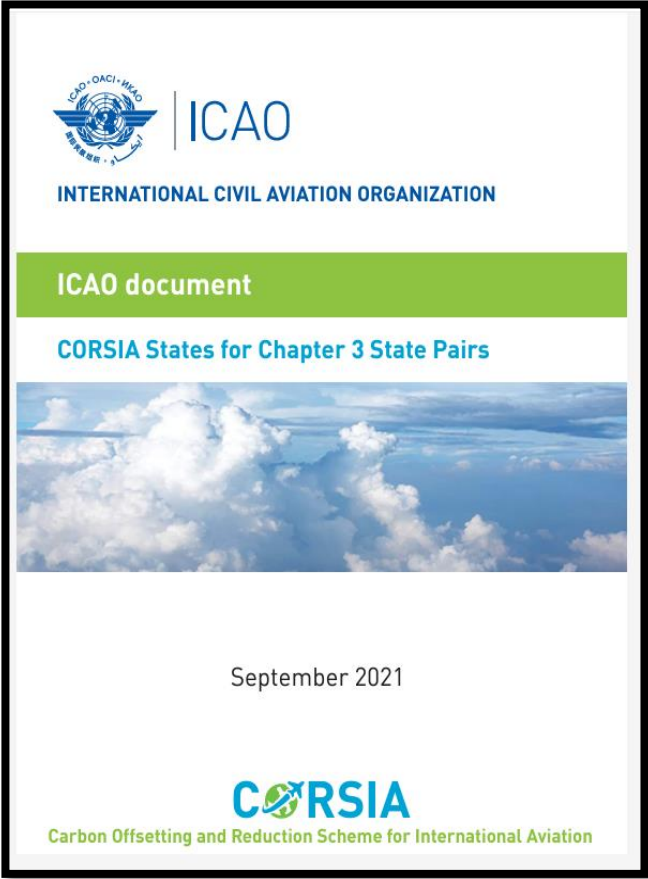
Total CO ₂ emissions from international flights (in tonnes):	10.591
Total CO ₂ emissions from flights subject to offsetting requirements (in tonnes):	8.797
Total number of international flights during reporting period:	530
Total number of international flights subject to offsetting requirements:	370
Total emissions reductions claimed from the use of CORSIA eligible fuels (in tonnes):	



2022 Sector's Growth Factor (SGF _T)	0.0 ^b
---	------------------

AO annual offsetting requirements=8797x 0= 0 offsett

As reflected in Doc. “CORSIA States for Chapter 3 State Pairs”. 107 State joint CORSIA from 01.01.2022



ICAO document — CORSIA States for Chapter 3 State Pairs

CORSIA States for Chapter 3 State Pairs

The following 107 States will participate in CORSIA from 1 January 2022:

Afghanistan	Guyana
Albania	Honduras
Armenia	Hungary
Australia	Iceland
Austria	Indonesia
Azerbaijan	Ireland
Bahamas	Israel
Barbados	Italy
Belgium	Jamaica
Belize	Japan
Benin	Kazakhstan
Bosnia and Herzegovina	Kenya
Botswana	Kiribati
Bulgaria	Latvia
Burkina Faso	Lithuania
Cameroon	Luxembourg
Canada	Madagascar
Cook Islands	Malaysia
Costa Rica	Mali
Côte d'Ivoire	Malta
Croatia	Marshall Islands
Cyprus	Mexico
Czechia	Monaco
Democratic Republic of the Congo	Montenegro
Denmark	Namibia
Dominican Republic	Nauru
El Salvador	Netherlands
Equatorial Guinea	New Zealand
Estonia	Nigeria
Finland	North Macedonia
France	Norway
Gabon	Oman
Gambia	Palau
Georgia	Papua New Guinea
Germany	Philippines
Ghana	Poland
Greece	Portugal
Grenada	Qatar
Guatemala	Republic of Korea

2

ICAO document — CORSIA States for Chapter 3 State Pairs


Republic of Moldova	Thailand
Romania	Tonga
Rwanda	Trinidad and Tobago
San Marino	Turkey
Saint Kitts and Nevis	Tuvalu
Saudi Arabia	Uganda
Serbia	Ukraine
Singapore	United Arab Emirates
Slovakia	United Kingdom
Slovenia	United Republic of Tanzania
South Sudan	United States
Spain	Uruguay
Suriname	Vanuatu
Sweden	Zambia
Switzerland	

- END -

3

2023 SGF from the CCR- 115 States

To be published by ICAO on the CORSIA website around the end
of October 2024




ICAO


INTERNATIONAL CIVIL AVIATION ORGANIZATION

ICAO document

CORSIA States for Chapter 3 State Pairs



July 2022



Carbon Offsetting and Reduction Scheme for International Aviation

ICAO document — CORSIA States for Chapter 3 State Pairs

CORSIA States for Chapter 3 State Pairs

The following 115 States will participate in CORSIA from 1 January 2023:

- | | |
|----------------------------------|----------------------------|
| Afghanistan | Grenada |
| Albania | Guatemala |
| Armenia | Guyana |
| Australia | Honduras |
| Austria | Hungary |
| Azerbaijan | Iceland |
| Bahamas | Indonesia |
| Barbados | Ireland |
| Belgium | Israel |
| Belize | Italy |
| Benin | Jamaica |
| Bosnia and Herzegovina | Japan |
| Botswana | Kazakhstan |
| Bulgaria | Kenya |
| Burkina Faso | Kiribati |
| Cambodia | Latvia |
| Cameroon | Lithuania |
| Canada | Luxembourg |
| Cook Islands | Madagascar |
| Costa Rica | Maldives |
| Côte d'Ivoire | Malaysia |
| Croatia | Mali |
| Cuba | Malta |
| Cyprus | Marshall Islands |
| Czechia | Mexico |
| Democratic Republic of the Congo | Micronesia (Federated Stat |
| Denmark | Monaco |
| Dominican Republic | Montenegro |
| El Salvador | Namibia |
| Equatorial Guinea | Nauru |
| Estonia | Netherlands |
| Finland | New Zealand |
| France | Nigeria |
| Gabon | North Macedonia |
| Gambia | Norway |
| Georgia | Oman |
| Germany | Paku |
| Ghana | Papua New Guinea |
| Greece | |

ICAO document — CORSIA States for Chapter 3 State Pairs

- | | |
|----------------------------------|-----------------------------|
| Philippines | Sweden |
| Poland | Switzerland |
| Portugal | Thailand |
| Qatar | Timor-Leste |
| Republic of Korea | Tonga |
| Republic of Moldova | Trinidad and Tobago |
| Romania | Turkey |
| Rwanda | Tuvalu |
| San Marino | Uganda |
| Saint Kitts and Nevis | Ukraine |
| Saint Vincent and the Grenadines | United Arab Emirates |
| Saudi Arabia | United Kingdom |
| Serbia | United Republic of Tanzania |
| Singapore | United States |
| Slovakia | Uruguay |
| Slovenia | Vanuatu |
| South Sudan | Zambia |
| Spain | Zimbabwe |
| Suriname | |

— END —



This project is funded by the European Union
and implemented by EASA

OFFSETTING WITH CORSIA ELIGIBLE EMISSIONS UNITS

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CORSIA Eligible Emissions Units-

CORSIA Eligible Emissions Units serve to offset the greenhouse gas footprint of international civil aviation by undertaking different activities that reduce or avoid GHG emissions.

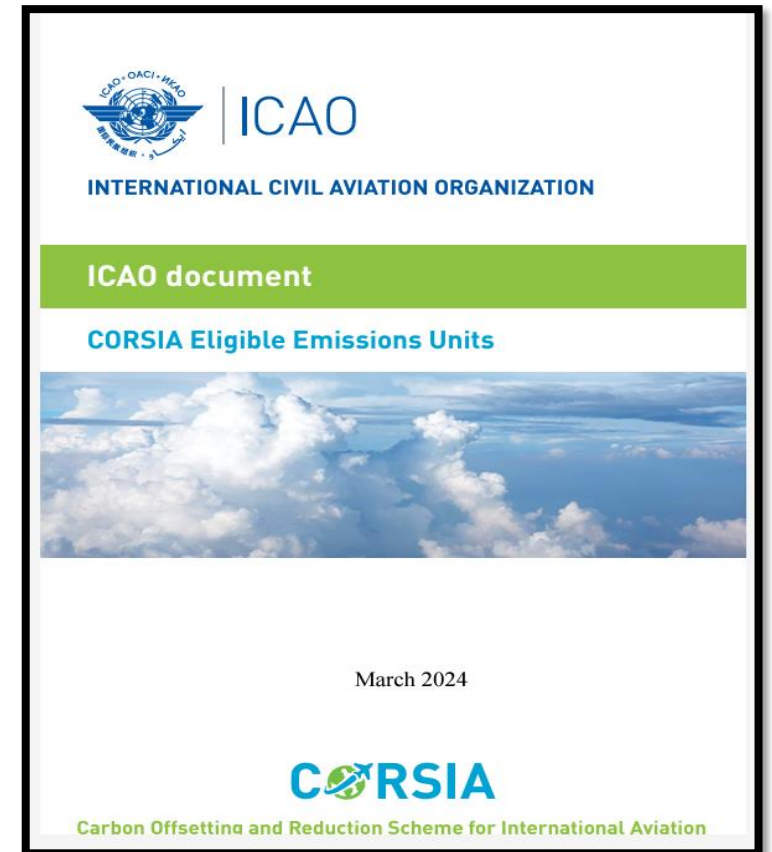
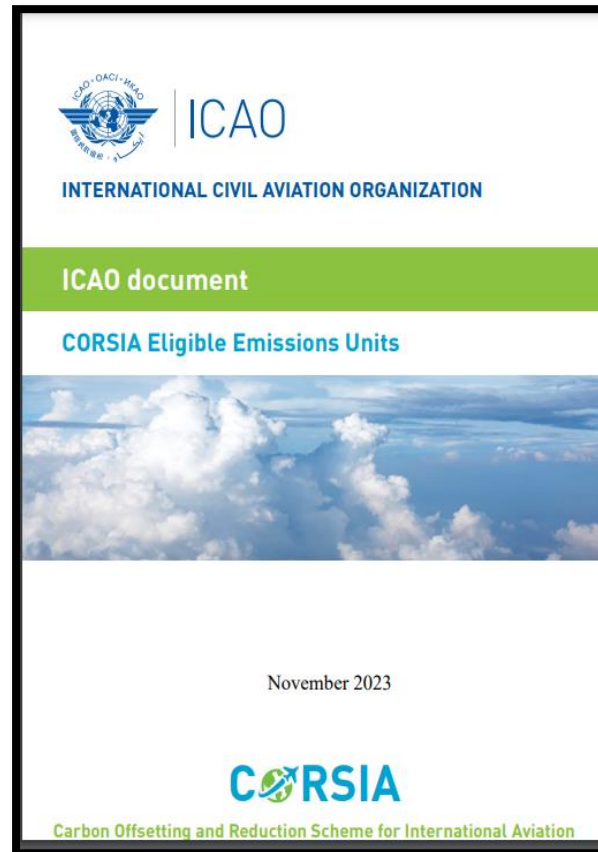
While there are dozens of different activity types and many methodologies to quantify them, most emissions unit activities can be sorted into six broad categories:

- (1) renewable energy;
- (2) agriculture, forestry and land use (AFOLU);
- (3) waste disposal;
- (4) household devices;
- (5) chemical processes and industrial manufacturing;
- (6) energy efficiency and fuel switching; and transportation

CORSIA and SAF/CEF

The AO can offset its CO2 emissions under CORSIA using CORSIA eligible emissions units

ICAO Council
determines
CORSIA Eligible
Emissions Units as
recommended by
the Technical
Advisory Body
(TAB)



CORSIA Emissions Unit Eligibility Criteria

Program Design Elements

- Clear Methodologies and Protocols, and their Development Process
- Scope Considerations
- Offset Credit Issuance and Retirement Procedures
- Identification and Tracking
- Legal Nature and Transfer of Units
- Validation and Verification procedures
- Program Governance
- Transparency and Public Participation Provisions
- Safeguards System
- Sustainable Development Criteria
- Avoidance of Double Counting, Issuance and Claiming

Carbon Offset Credit Integrity Assessment Criteria

- Are additional.
- Are based on a realistic and credible baseline.
- Are quantified, monitored, reported, and verified.
- Have a clear and transparent chain of custody.
- Represent permanent emissions reductions.
- Assess and mitigate against potential increase in emissions elsewhere.
- Are only counted once towards a mitigation obligation.
- Do no net harm

CORSIA Eligible Emissions Units (EEU) Criteria

CORSIA Eligible Emissions Units (EEU) are identified by:

1. Emissions Unit Programme
2. Eligibility Timeframe: Eligible for cancellation for use toward CORSIA offsetting requirements in the compliance period:
 1. Pilot phase (2021 – 2023)
 2. First phase (i.e., 2024 – 2026)
3. Vintage Criteria: Issued to activities that started their first crediting period from 1 January 2016 and in respect of emissions reductions that occurred through 31 Dec 2020
4. Scope of Eligibility: Linked to activity and/or unit types, methodologies, programme elements, and/or procedural classes

Example from the GSF documents

Vintage

Gold Standard projects that have a first crediting period start date on or after 01 January 2016 are eligible to supply credits for CORSIA, for credits with vintages between 01 January 2016 and 31 December 2020.

Microscale

Microscale projects that use the Gold Standard Validation and Verification Fund are not eligible to supply credits to the CORSIA scheme.

Land Use and Forestry

Planned Emission Reductions (PERs) are not eligible under CORSIA. Gold Standard VERs from certain Afforestation/Reforestation activities are not eligible, but credits from soil carbon, agriculture, and livestock projects may be eligible.

CORSIA Eligible Programmes for the 2021 -2023 Compliance Period (Pilot Phase)

- American Carbon Registry (ACR)
- Architecture for REDD+ Transactions (ART)
- BioCarbon Fund for Sustainable Forest Landscapes (ISFL)
- Clean Development Mechanism (CDM)
- China GHG Voluntary Emission Reduction Program (CCER)
- Climate Action Reserve (CAR)
- Forest Carbon Partnership Facility Program (FCPF)
- Global Carbon Council (GCC)
- The Gold Standard (GS)
- SOCIALCARBON
- Verified Carbon Standard (VCS)

Note: The emission reduction occurred from a project, registered under any of the cited programmes, between a period of 01/01/2016 to 31/12/2020 are only eligible for pilot phase, only if the projects have their first crediting period from 01/01/2016.
For ACR and ART it is up to 31/12/2023.

CORSIA Eligible Programmes for the 2024 -2026 Compliance Period (First Phase) – Vintage Criteria

- American Carbon Registry (ACR)
- Architecture for REDD+ Transactions (ART)

Note: The emission reduction occurred from a project, registered under any of above mechanism, between a period of 01/01/2021 to 31/12/2026 are only eligible for first phase, only if the projects have their first crediting period from 01/01/2016.

CORSIA-OFFSETTING

The State calculates the offsetting requirements attributed to an aeroplane operator.

Operator's annual emissions subject
to offsetting requirements

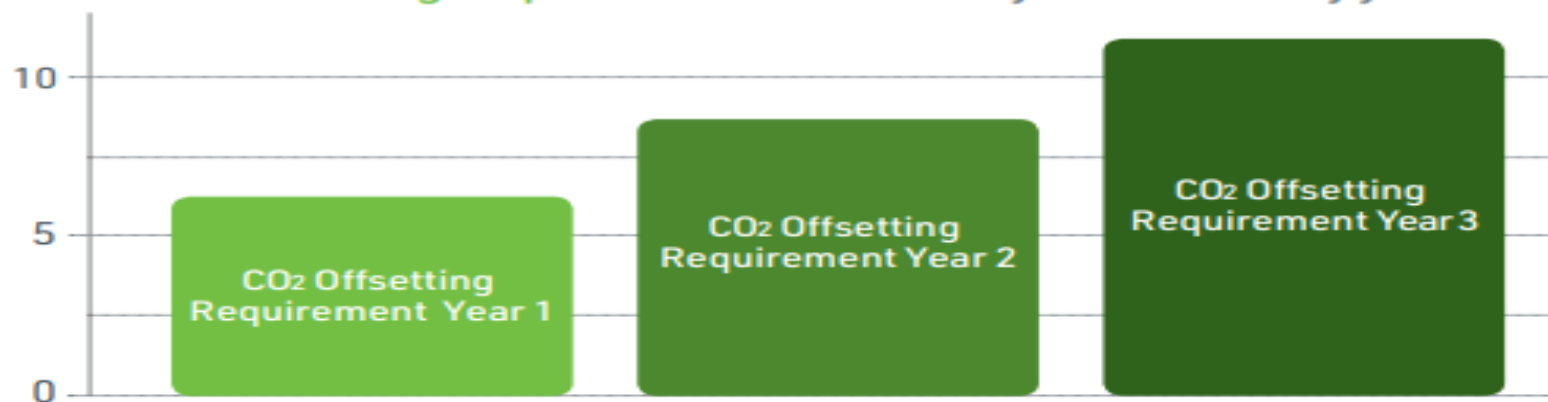
X

Growth Factor

=

CO₂ offsetting requirements

CO₂ Offsetting Requirements calculated by the State every year





This project is funded by the European Union
and implemented by EASA

CORSIA Eligible Fuels – to be deducted from the amount to be offset if.....

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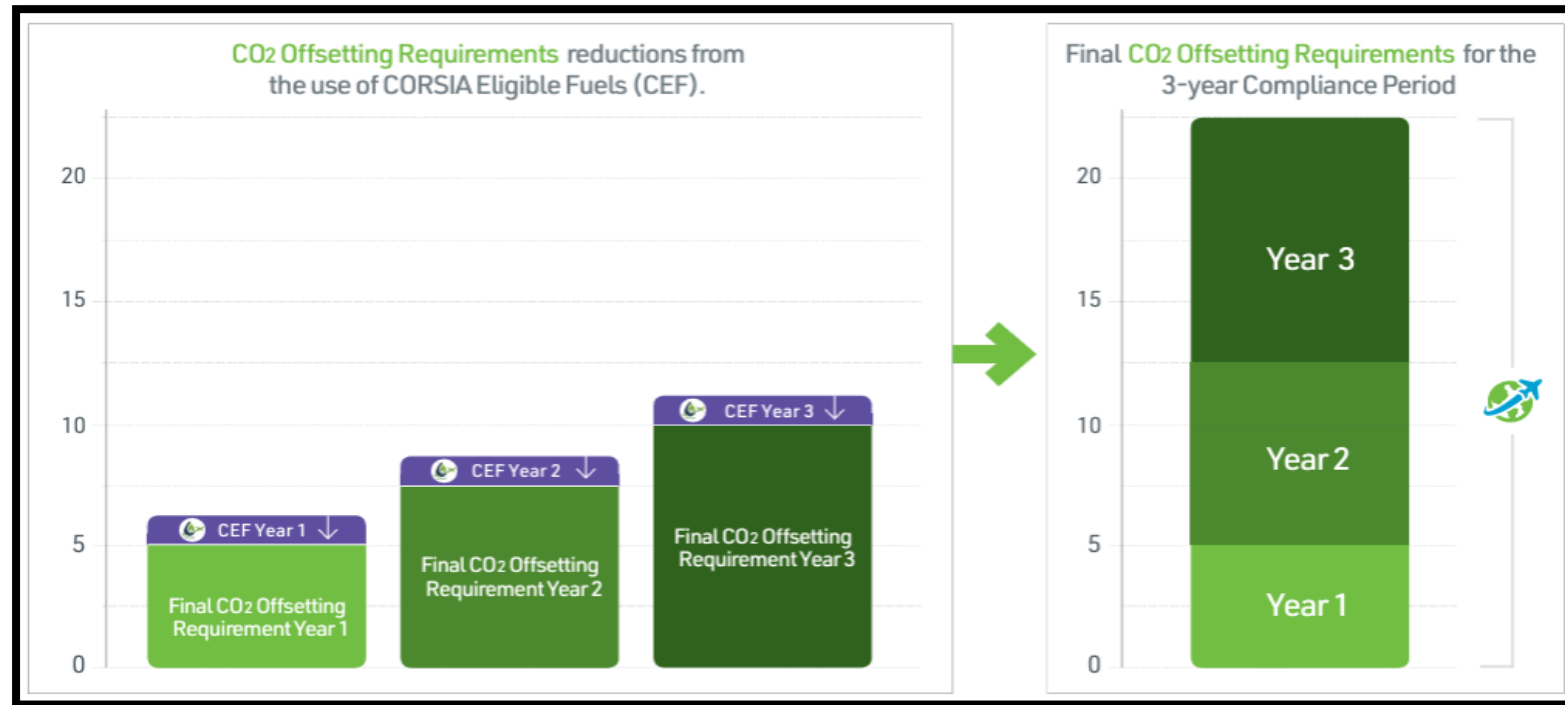
CORSIA and SAF/CEF

Aeroplane under “CORSIA” can offset emissions growth over the threshold by

- i) buying tradeable carbon credits or
- ii) deploying CORSIA-eligible fuels

CORSIA offsetting with CEF

If the **AO reports the use of CEF** for a 3-year compliance period, the SA accounts for the benefits from the use of CEF and inform the AO of its final CO₂ offsetting requirements for the 3-year compliance period



CORSIA and SAF/CEF

What type of SAF can be CORSIA eligible?

- Lower-carbon aviation fuel (LCAF) -fossil fuel with reduced carbon intensity due to measures applied during fuel production-
- SAF: first- and second-generation biofuels from several feedstock families and production technologies

CORSIA and SAF/CEF

CORSIA eligibility criteria

- 1) GHG emissions reduction: fuels to demonstrate a 10% lifecycle emission reduction compared to conventional fossil fuels at 89 gCO₂/MJ.
- 2) Eligibility criteria linked to impact categories, such as land conversion, water use and food security, as well as certification guidelines for fuel deliveries

CORSIA Eligible Fuels

- The AO to indicate in the ER if it uses CORSIA Eligible fuels to attach an additional CORSIA Eligible Fuels Supplementary Information
- In this template the AO should include
 - Emissions reductions claimed
 - Fuel type, mass and Life Cycle Emissions value (LCEF)
 - Evidence of compliance with Sustainability Criteria

CORSIA
**CORSIA ELIGIBLE FUELS
SUPPLEMENTARY INFORMATION***
(* supplementary information to the Emissions Report from aeroplane operator to State)

CONTENTS
[Template information](#)
[Aeroplane operator identification and reporting information](#)
[CORSIA eligible fuel claim form](#)
[Summary of CORSIA eligible fuels information](#)

Template Information

Template provided by:	
Version (publication date):	

Template CEF supplementary information

AEROPLANE OPERATOR IDENTIFICATION AND REPORTING INFORMATION

a) Name of aeroplane operator

Please enter the name of the aeroplane operator. This name should be the legal entity carrying out the aviation activities.

a1) Address of the aeroplane operator

Please enter the address of the aeroplane operator.

Address:	
City:	
State/Province/Region:	
Postcode/ZIP:	
Country:	

b) Reporting year

Template CEF supplementary information

CORSIA ELIGIBLE FUEL CLAIM FORM

Note: for each claim of emissions reductions from the use of CORSIA eligible fuels, please replicate this form and fill separately.

Fuel Claim #:

a) Purchase date

Please enter the date when the neat CORSIA eligible fuel was purchased. Use the format yyyy-mm-dd.

b) Identification of the producer of the CORSIA eligible fuel

b1) Name of producer of the neat CORSIA eligible fuel

Please enter the name of the fuel producer.

b2) Address of the producer of the neat CORSIA eligible fuel

Please enter the address of the producer of the neat CORSIA eligible fuel.

Address:	<input type="text"/>
City:	<input type="text"/>
State/Province/Region	<input type="text"/>
Postcode/ZIP:	<input type="text"/>
Country:	<input type="text"/>

c) Fuel production

c1) Date of production of the neat CORSIA eligible fuel

Please enter the date of production of the neat CORSIA eligible fuel. Use the format yyyy-mm-dd.

c2) Location of the production of the neat CORSIA eligible fuel

Please enter the address of the production of the neat CORSIA eligible fuel.

Address:	<input type="text"/>
City:	<input type="text"/>
State/Province/Region	<input type="text"/>
Postcode/ZIP:	<input type="text"/>
Country:	<input type="text"/>

c3) Batch identification number:

c4) Mass of each batch of neat CORSIA eligible fuel produced

Please enter the total mass of each batch of neat CORSIA eligible fuel produced (in tonnes).

d) Fuel type

d1) Type of fuel

Please enter the type of fuel (i.e., Jet-A, Jet-A1, Jet-B, AvGas) for the purpose of computation of Life Cycle Emissions factors.

d2) Feedstock type

Please enter the information on the feedstock used to create the neat CORSIA eligible fuel.

d3) Conversion process

Please enter the conversion process (i.e., a type of technology used to convert a feedstock into neat CORSIA eligible fuel).

e) Portion of batch purchased (if needed)

e1) Percentage

If less than an entire batch of neat CORSIA eligible fuel is purchased, please enter the proportion of neat CORSIA eligible fuel batch purchased (in percentage terms).

e2) Mass of batch purchased

Please enter the mass of CORSIA eligible fuel batch purchased (in tonnes).

Template CEF supplementary information

f) Mass of neat CORSIA eligible fuel

Please enter the total mass of all batches of neat CORSIA eligible fuel included in the claim (in tonnes).

g) Sustainability documentation

Please provide evidence that the fuel satisfies the CORSIA Sustainability Criteria i.e., reference of attached valid certification document.

h) Life Cycle Emissions Values of the CORSIA eligible fuel

h1) Default or Actual Life Cycle Emissions value (LCEF)

Please enter the Life Cycle Emissions value (in gCO₂e/MJ).

h2) Default or Actual Core Life Cycle Assessment (LCA) value

Please enter the Core Life Cycle Assessment (LCA) value (in gCO₂e/MJ).

h3) Default Induced Land Use Change (ILUC) value

Please enter the Induced Land Use Change (ILUC) value (in gCO₂e/MJ).

i) Intermediate purchaser 1 (if needed)

If the aeroplane operator claiming emissions reductions from the use of CORSIA eligible fuels is not the original purchaser of the fuel from the producer (e.g., the aeroplane operator purchased fuel from a broker or a distributor), include the identity and contact information of these purchaser(s).

i1) Name of the intermediate purchaser 1.

Please enter the name of the intermediate purchaser 1.

i2) Address of the intermediate purchaser 1.

Please enter the address of the intermediate purchaser 1.

Address:	<input type="text"/>
City:	<input type="text"/>
State/Province/Region	<input type="text"/>
Postcode/ZIP:	<input type="text"/>
Country:	<input type="text"/>

j) Intermediate purchaser 2 (if needed)

Please include the identity and contact information of the intermediate purchaser 2.

j1) Name of the intermediate purchaser 2.

Please enter the name of the intermediate purchaser 2.

j2) Address of the intermediate purchaser 2.

Please enter the address of the intermediate purchaser 2.

Address:	<input type="text"/>
City:	<input type="text"/>

Template CEF supplementary information

k) CORSIA eligible fuel shipper

k1) Name of the CORSIA eligible fuel shipper.

Please enter the name of the party responsible for shipping of the neat CORSIA eligible fuel to the fuel blender.

k2) Address of the CORSIA eligible fuel shipper.

Please enter the address of the party responsible for shipping of the neat CORSIA eligible fuel to the fuel blender.

Address:	
City:	
State/Province/Region	
Postcode/ZIP:	
Country:	

l) Fuel blender

l1) Name of the fuel blender

Please enter the name of the party responsible for blending neat CORSIA eligible fuel with aviation fuel.

l2) Address of the fuel blender

Please enter the address of the party responsible for blending neat CORSIA eligible fuel with aviation fuel.

Address:	
City:	
State/Province/Region	
Postcode/ZIP:	
Country:	

m) Location of blending

Please enter the location where the neat CORSIA eligible fuel is blended with aviation fuel.

Address:	
City:	
State/Province/Region	
Postcode/ZIP:	
Country:	

n) Neat CORSIA eligible fuel received

n1) Date the neat CORSIA eligible fuel was received

Please enter the date the neat CORSIA eligible fuel was received by blender. Use the format yyyy-mm-dd.

n2) Mass of neat CORSIA eligible fuel received

Please enter the mass of neat CORSIA eligible fuel received (in tonnes).

o) Blend ratio of neat CORSIA eligible fuel and aviation fuel

Please enter the blend ratio of neat CORSIA eligible fuel and aviation fuel.

Template CEF supplementary information

p) Documentation demonstrating blending

Please provide documentation demonstrating that the batch or batches of CORSIA eligible fuel used (e.g., the subsequent Certificate of Analysis of the blended fuel).

q) Mass of neat CORSIA eligible fuel claimed

Please enter the mass of neat CORSIA eligible fuel claimed (in tonnes).

SUMMARY OF CORSIA ELIGIBLE FUELS INFORMATION

a) Summary of CORSIA eligible fuels (by fuel claim #)

Please provide a summary of the CORSIA eligible fuels claimed for the reporting year.

Fuel claim #	Fuel type			Total mass of neat CORSIA eligible fuel claimed (in tonnes)	Life cycle emissions values of the CORSIA eligible fuel	Emissions reduction from CORSIA eligible fuels claimed (in tonnes)
	Type of fuel	Feedstock type	Conversion process			
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

b) Summary of information of CORSIA eligible fuels claimed

b1) Total of emissions reduction from CORSIA eligible fuels claimed (in tonnes)

Please enter the sum of the values included in column "Emissions reduction from CORSIA eligible fuels claimed (in tonnes)" of the table above.



This project is funded by the European Union
and implemented by EASA

CORSIA Eligible Emissions Units

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CORSIA Eligible Emissions Units

ICAO Council determines
CORSIA Eligible Emissions
Units as recommended
by the Technical Advisory
Body (TAB)



CORSIA Emissions Unit Eligibility Criteria

Program Design Elements

- Clear Methodologies and Protocols, and their Development Process
- Scope Considerations
- Offset Credit Issuance and Retirement Procedures
- Identification and Tracking
- Legal Nature and Transfer of Units
- Validation and Verification procedures
- Program Governance
- Transparency and Public Participation Provisions
- Safeguards System
- Sustainable Development Criteria
- Avoidance of Double Counting, Issuance and Claiming

Carbon Offset Credit Integrity Assessment Criteria

- Are additional.
- Are based on a realistic and credible baseline.
- Are quantified, monitored, reported, and verified.
- Have a clear and transparent chain of custody.
- Represent permanent emissions reductions.
- Assess and mitigate against potential increase in emissions elsewhere.
- Are only counted once towards a mitigation obligation.
- Do no net harm

CORSIA Eligible Emissions Units (EEU) Criteria

CORSIA Eligible Emissions Units (EEU) are identified by:

1. Emissions Unit Programme
2. Eligibility Timeframe: Eligible for cancellation for use toward CORSIA offsetting requirements in the compliance period:
 1. Pilot phase (2021 – 2023)
 2. First phase (i.e., 2024 – 2026)
3. Vintage Criteria: Issued to activities that started their first crediting period from 1 January 2016 and in respect of emissions reductions that occurred through 31 Dec 2020
4. Scope of Eligibility: Linked to activity and/or unit types, methodologies, programme elements, and/or procedural classes

Example from the GSF documents

Vintage

Gold Standard projects that have a first crediting period start date on or after 01 January 2016 are eligible to supply credits for CORSIA, for credits with vintages between 01 January 2016 and 31 December 2020.

Microscale

Microscale projects that use the Gold Standard Validation and Verification Fund are not eligible to supply credits to the CORSIA scheme.

Land Use and Forestry

Planned Emission Reductions (PERs) are not eligible under CORSIA. Gold Standard VERs from certain Afforestation/Reforestation activities are not eligible, but credits from soil carbon, agriculture, and livestock projects may be eligible.

CORSIA Eligible Programmes for the 2021 -2023 Compliance Period (Pilot Phase)

- American Carbon Registry (ACR)
- Architecture for REDD+ Transactions (ART)
- BioCarbon Fund for Sustainable Forest Landscapes (ISFL)
- Clean Development Mechanism (CDM)
- China GHG Voluntary Emission Reduction Program (CCER)
- Climate Action Reserve (CAR)
- Forest Carbon Partnership Facility Program (FCPF)
- Global Carbon Council (GCC)
- The Gold Standard (GS)
- SOCIALCARBON
- Verified Carbon Standard (VCS)

Note: The emission reduction occurred from a project, registered under any of the cited programmes, between a period of 01/01/2016 to 31/12/2020 are only eligible for pilot phase, only if the projects have their first crediting period from 01/01/2016.

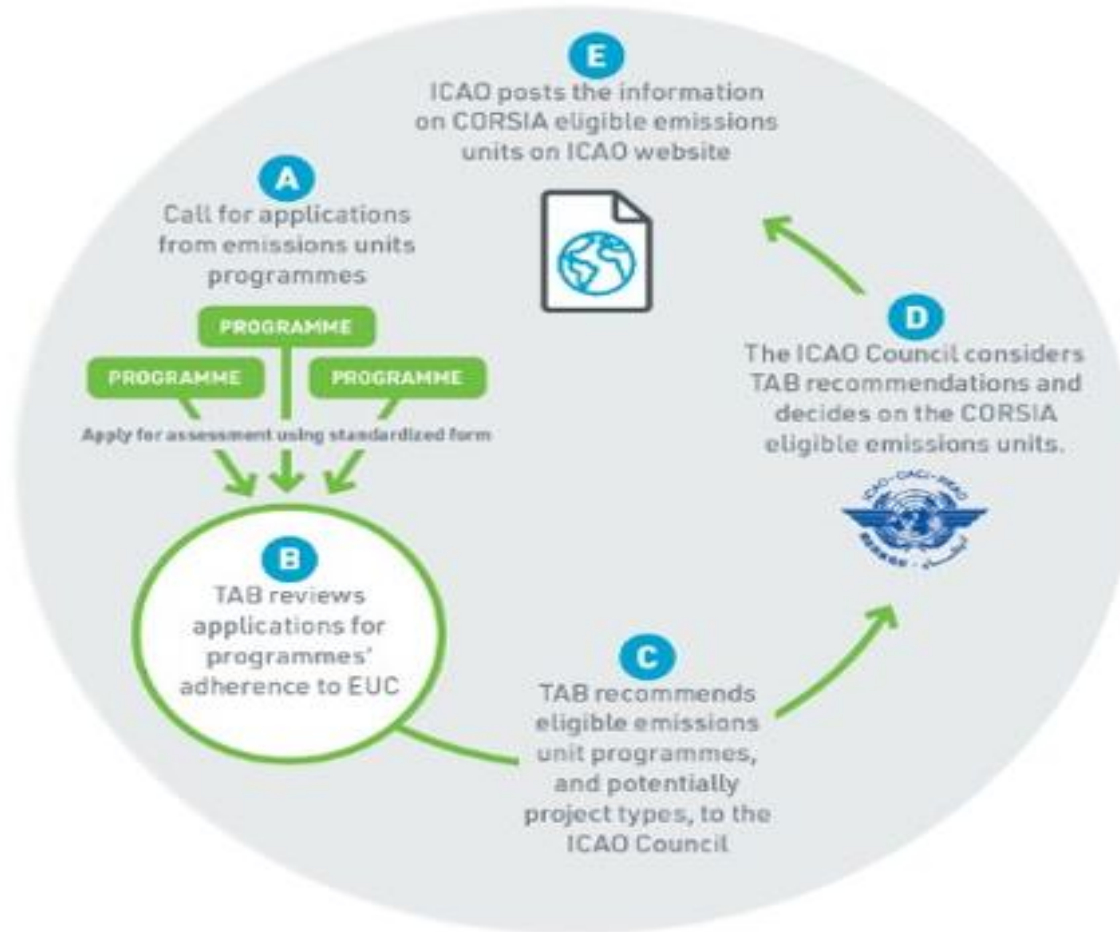
For ACR and ART it is up to 31/12/2023.

CORSIA Eligible Programmes for the 2024 -2026 Compliance Period (First Phase) – Vintage Criteria

- American Carbon Registry (ACR)
- Architecture for REDD+ Transactions (ART)

Note: The emission reduction occurred from a project, registered under any of above mechanism, between a period of 01/01/2021 to 31/12/2026 are only eligible for first phase, only if the projects have their first crediting period from 01/01/2016.

Process to determine CORSIA eligible emissions units



2024 Call for application

ICAO received **11 new requests** from the programme

1. Asia Carbon Institute
2. BioCarbon Standard
3. Carbon Asset Solutions Soil Carbon Methodology
4. C-Capsule
5. Ecosystem Restoration Standard
6. International Carbon Registry
7. Isometric
8. KCCI Carbon Standard (KCS) Program
9. POPLÉ
10. Puro.earth
11. Reverse

ICAO received **8 material updates** to previously-assessed programmes, submitted by April 30, 2024

1. BioCarbon Fund Initiative for Sustainable Forest Landscape
2. Cercarbono
3. Climate Action Reserve
4. Forest Carbon Partnership Facility
5. Global Carbon Council
6. Gold Standard
7. Premium Thailand Voluntary Emission Reduction Program
8. Verified Carbon Standard

2024 TAB WORK PROGRAMME

2024 TAB Work Programme

Activities	2024																																																								
	January				February				March				April				May				June				July				August				September				October				November				December												
	Jan 01	Jan 08	Jan 15	Jan 22	Jan 29	Feb 05	Feb 12	Feb 19	Feb 26	Mar 05	Mar 12	Mar 19	Mar 26	Apr 02	Apr 09	Apr 16	Apr 23	Apr 30	May 07	May 14	May 21	May 28	Jun 04	Jun 11	Jun 18	Jun 25	Jul 02	Jul 09	Jul 16	Jul 23	Jul 30	Aug 06	Aug 13	Aug 20	Aug 27	Sep 03	Sep 10	Sep 17	Sep 24	Sep 30	Oct 07	Oct 14	Oct 21	Oct 28	Nov 04	Nov 11	Nov 18	Nov 25	Dec 02	Dec 09	Dec 16	Dec 23	Dec 30				
1st Quarter 2024																																																									
1.1	Call for applications - 2024 assessment cycle (5 February - 4 March 2024)																																																								
1.2	ICAO webinar for 2024 applications (9 Feb 2024)																																																								
1.3	2024 TAB Assessment cycle																																																								
1.4	231 st Council Session: Consideration of TAB recommendations - Fall 2023 assessment																																																								
2nd Quarter 2024																																																									
2.1	Call for public comments - 2024 assessment cycle																																																								
2.2	Deadline (15 April 2024) for programme change notification forms to be considered at 233 rd Council Session (September 2024)																																																								
3rd Quarter 2024																																																									
3.1	Deadline (15 August 2024) for programme change notification forms to be considered at 234 th Council Session (March 2025)																																																								
4th Quarter 2024																																																									
4.1	233 rd Council Session: Consideration of TAB recommendations on programmes submitting programme change notification forms (submitted April 2024) and 2024 assessment cycle applications																																																								

Note 1: The above TAB Work Programme and Timeline is subject to further changes.
Note 2: The call for applications for the 2024 assessment cycle, for the first phase of CORSIA, will open in the first quarter of 2024

CORSIA Eligible Emissions Units (EEU) Criteria

CORSIA Eligible Emissions Units (EEU) are identified by:

1. Emissions Unit Programme
2. Eligibility Timeframe: Eligible for cancellation for use toward CORSIA offsetting requirements in the compliance period:
 1. Pilot phase (2021 – 2023)
 2. First phase (i.e., 2024 – 2026)
3. Vintage Criteria: Issued to activities that started their first crediting period from 1 January 2016 and in respect of emissions reductions that occurred through 31 Dec 2020
4. Scope of Eligibility: Linked to activity and/or unit types, methodologies, programme elements, and/or procedural classes

CORSIA Eligible Programmes – Vintage Criteria

Programme	Pilot phase	First phase
ACR	The emission reduction occurred from a project, registered under any of these programmes, between a period of 01/01/2016 to 31/12/2023 are eligible for pilot phase, only if the projects have their first crediting period from 01/01/2016.	The emission reduction occurred from a project, registered under any of these programmes, between a period of 01/01/2021 to 31/12/2026 are eligible for first phase, only if the projects have their first crediting period from 01/01/2016.
ART		
ISFL	The emission reduction occurred from a project, registered under any of these programmes, between a period of 01/01/2016 to 31/12/2020 are only eligible for pilot phase, only if the projects have their first crediting period from 01/01/2016.	
CDM		
CCER		
CAR		
FCPF		
GCC		
GS		
SOCIALCARBON		
VCS		

GS registry: Namibia's project in the Gold Standards...but not CORSIA eligible

IMPACT REGISTRY

CREDITSPROJECTS

LOGIN

ALL PROJECTS

Project StatusCountryProject TypeAttributes

Namibia

GS ID	PROJECT DETAILS	STATUS	SDGS	PROJECT TYPE	COUNTRY
GS7784	Namene Solar Light Company: Replacing Kerosene lights and paraffin candles by solar lights in Namibia by Namene Solar Lights Ltd.		Estimated	Solar Thermal Electricity	Namibia

IMPACT REGISTRY

CREDITSPROJECTS

NAMIBIA

GS ID	REGION	PRODUCT	ESTIMATED SDG IMPACTS	PROJECT TYPE	STATUS
7784	Namibia	<div>NONE</div> <div>ISSUED</div> <div>RETIRED</div>		Solar Thermal - Electricity	

PROJECT DEVELOPER	Namene Solar Lights Ltd.			DESCRIPTION To eradicate the use of high cost, dangerous and GHG emitting kerosene lamps and paraffin candles, Namene Solar Light Company aims to distribute Lighting Global certified pico-solar lights (the SM100) to households in Namibia. A significant market penetration of pico-solar lights will reduce the emitted mass of GHGs and climate forcing black carbon generated from fossil fuel-based sources of lighting used by a large amount of households in Namibia. Climate financing secured from successful Gold Standard accreditation would be used to support the substitution of kerosene lamps and paraffin candles with pico-solar lights, the SM100. Critical
METHODOLOGY	AMS-III.A.R. Substituting fossil fuel based lighting with LED lighting systems	CREDITING PERIOD	Dec 31, 2021 — Dec 30, 2026	
STANDARDS VERSION	Gold Standard for the Global Goals	ANNUAL ESTIMATED CREDITS	41,869	
PROJECT SCALE	Small Scale	PROJECT TYPE	Solar Thermal - Electricity	

IMPACT REGISTRY

CREDITSPROJECTS

LOGIN

ISSUANCE LIST

VINTAGE	QUANTITY	PRODUCT	ISSUANCE DATE	ACTIONS
There are no issuances.				

0 of 0<1>

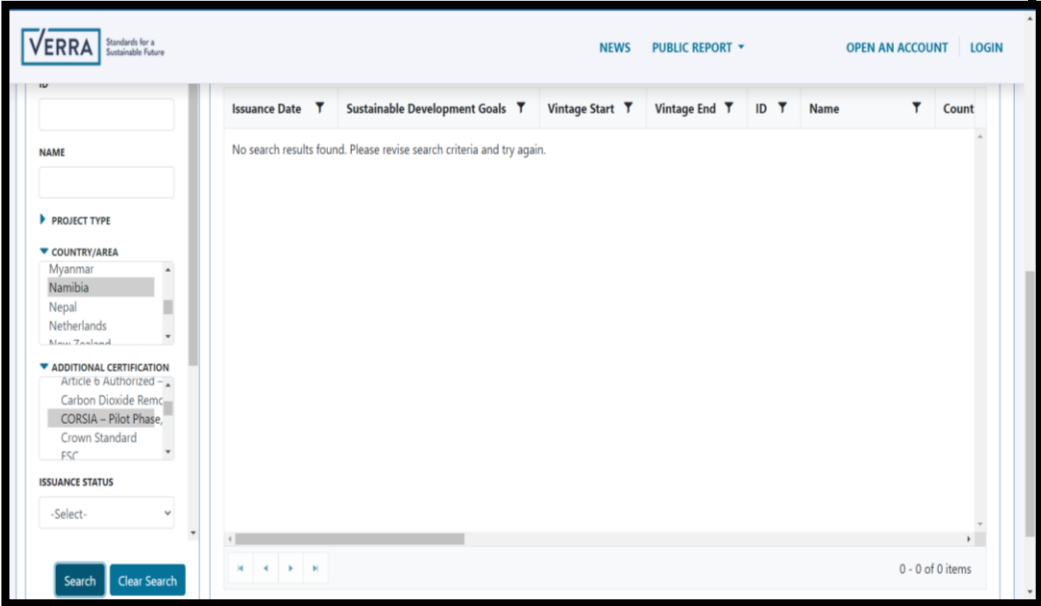
CERTIFICATION DOCUMENTS

VIEW CERTIFICATION DOCUMENTS IN SUSTAINCERT

RETIREMENTS

DATE	VINTAGE	SERIAL NUMBER	QUANTITY	PRODUCT	STATUS	NOTE	ACTIONS
There are no credits.							

VCS: Namibia's project in the Verra Registry



This screenshot shows the Verra Registry search interface with a list of projects. The left sidebar contains filters for NAME, PROJECT TYPE, COUNTRY/AREA (with Namibia selected), ADDITIONAL CERTIFICATION, and ISSUANCE STATUS. The main search area displays a table of projects.

Issuance Date	Sustainable Development Goals	Vintage Start	Vintage End	ID	Name	Count
21/02/2024		01/01/2022	31/12/2022	1959	Aussenkehr solar	Namib
08/01/2024		01/07/2022	31/12/2022	1915	Ombepo Wind	Namib
08/01/2024		01/01/2023	30/06/2023	1915	Ombepo Wind	Namib
13/09/2023		01/01/2022	31/12/2022	1885	Ejuva One and Ejuva Two Solar Projects	Namib

1 - 50 of 189 items

From the CORSIA eligible emissions units

Verified Carbon Standard (VCS)

Programme-designated Registry:	Verra Registry ³ https://verra.org/project/vcs-program/registry-system/
Eligibility Timeframe:	Eligible for cancellation for use toward CORSIA offsetting requirements in the 2021 – 2023 compliance period
Eligible Unit Dates:	Issued to activities that started their first crediting period from 1 January 2016 ⁴ and in respect of emissions reductions that occurred through 31 December 2020
Scope of Eligibility:	Verified Carbon Units (VCUs), including any additional certifications, and with the exclusion of the following activity and/or unit types, methodologies, programme elements, and/or procedural classes: <ul style="list-style-type: none"> d) California Early Action Offset Credits (EAOCs) e) California Registry Offset Credits (ROCs) f) VCUs issued to activities that have not reported their sustainable development contributions or co-benefits in the course of applying the Climate, Community and Biodiversity (CCB) Standards or the Sustainable Development Verified Impact Standard (SD VISTa Standard), or according to other

default list(s) of sustainable development criteria that the VCS clearly identifies for such use

- g) VCUs issued to project-level activities, including projects following the VCS Jurisdictional and Nested REDD+ (JNR) framework, that are developed in REDD+ countries⁵ and utilize methodologies within the programme's Sectoral Scope 14 and are estimated⁶ to generate greater than 7,000 Verified Carbon Units (VCUs) / annum individually or grouped **with these allowable exceptions:**
- a. VCUs issued to project-level activities under a jurisdictional programme following Scenario 2a of the VCS JNR framework
 - b. VCUs issued under a jurisdictional programme following Scenario 3 of the VCS JNR framework
 - c. VCUs issued to project-level activities that utilize one of the following methodologies: VM0012, VM0017, VM0021, VM0022, VM0024, VM0026 (and VMD0040), VM0032, VM0033, VM0036, VM0041, VM0042.

VCU's methodology

METHODOLOGIES

ON THIS PAGE

- VCS PROGRAM METHODOLOGIES
- SD VISTA PROGRAM METHODOLOGIES
- PLASTIC PROGRAM METHODOLOGIES
- DIGITALIZED PROGRAM METHODOLOGIES

Methodologies for quantifying project benefits are a key component of all Verra standard programs. All methodologies undergo a rigorous review and transparent stakeholder consultation process to ensure they meet the rules and requirements of each program.

VCS PROGRAM METHODOLOGIES

Example: scope of eligibility for CORSIA, GSF

The Gold Standard (GS)

Programme-designated Registry:

GSF Impact Registry³
<https://registry.goldstandard.org/projects?q=&page=1>

Eligibility Timeframe:

Eligible for cancellation for use toward CORSIA offsetting requirements in the 2021 – 2023 compliance period

Eligible Unit Dates:

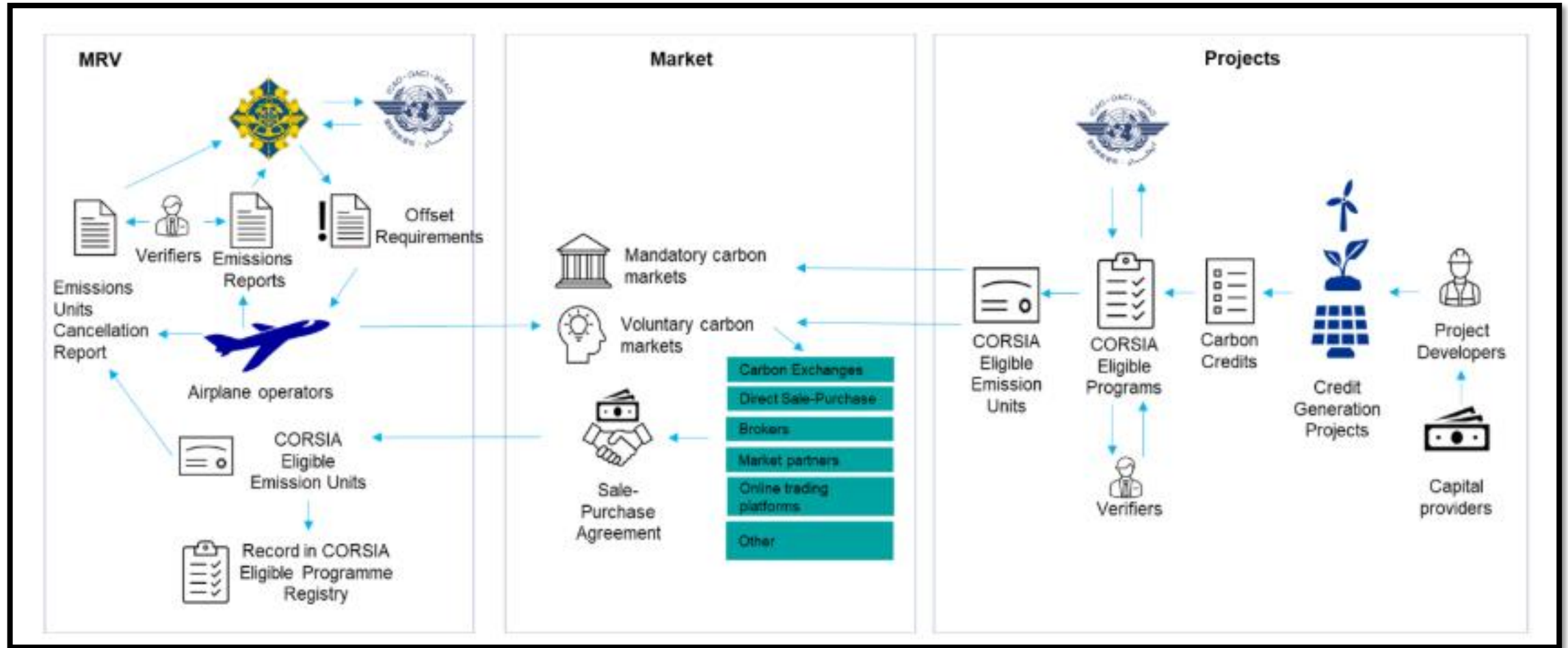
Issued to activities that started their first crediting period from 1 January 2016⁴ and in respect of emissions reductions that occurred through 31 December 2020

Scope of Eligibility:

The Gold Standard verified emissions reductions (VERs), including any additional certifications, and with the exclusion of the following activity and/or unit types, methodologies, programme elements, and/or procedural classes:

- a) Planned Emission Reductions (PERs)
- b) Units issued from micro scale activities where an accredited entity has not carried out validation and verification
- c) VERs issued to all activities that are developed in REDD+ countries⁵ and utilize methodologies in the programme's Land Use and Forestry & Agriculture categories and are estimated⁶ to generate greater than 7,000 Verified Emissions Reductions (VERs) / annum individually or grouped, with the allowable exception of activities that utilize methodologies in the Soil Organic Carbon, Agriculture, and Livestock categories.

CORSIA OFFSETTING SCHEME





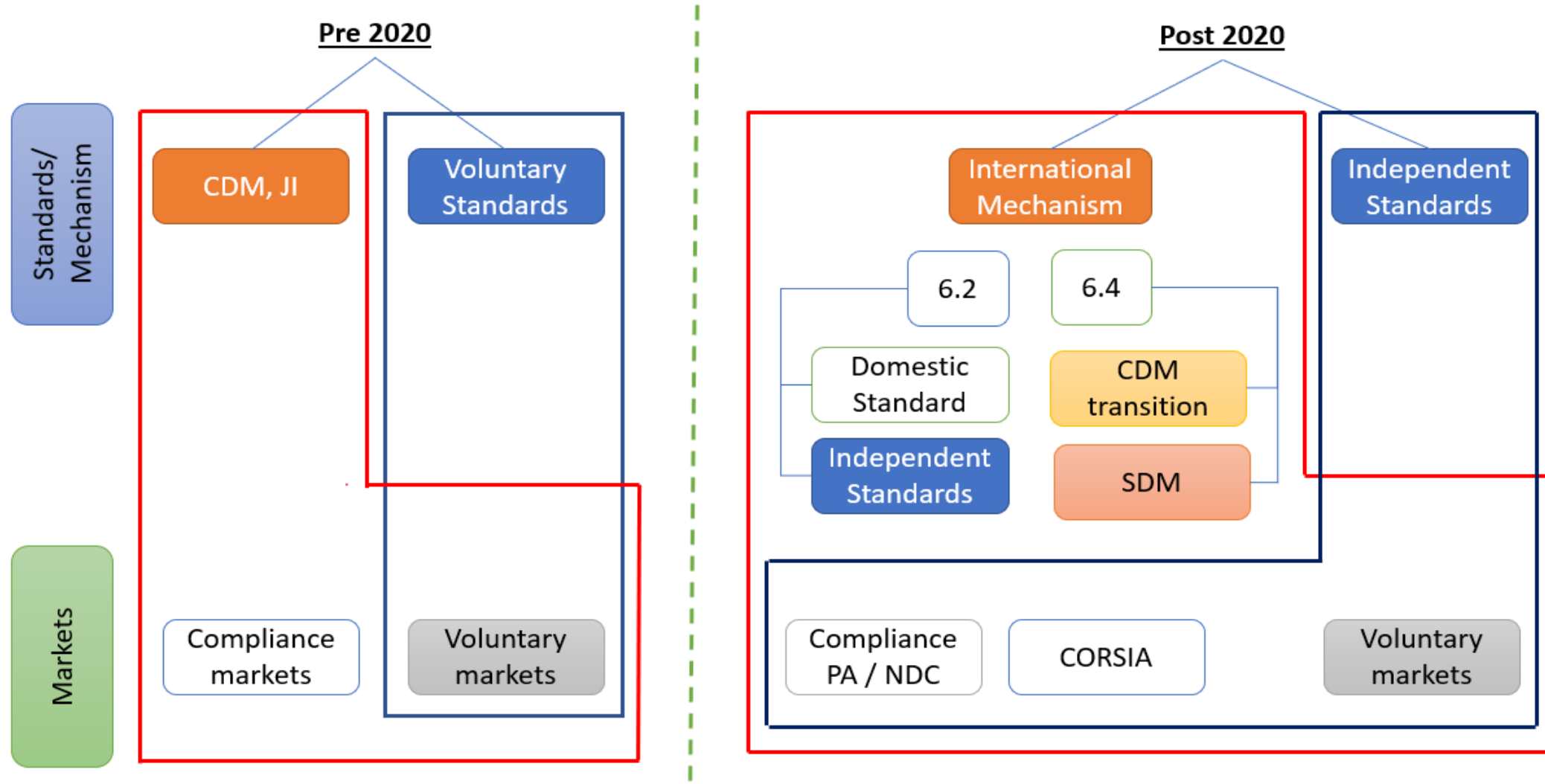
This project is funded by the European Union
and implemented by EASA

Discussion with the Ministry of environment and actions under carbon market for ITMO, ART 6 and opportunities under CORSIA to maximise synergies and promotion of CORSIA units

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Pre-and post-2020 carbon market situation



Carbon market profile, Namibia

- November 2023: **draft Carbon Market Framework (CMF)** aimed at setting up processes for developing and implementing carbon market activities in Namibia.
- CMF TO operationalise carbon crediting mechanisms under article 6,4 of the Paris Agreement
- Namibia's second updated NDCs have identified carbon markets as a strategy for mobilising climate finance to fund both adaptation and mitigation measures.



This project is funded by the European Union
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Thank you

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