

SOCIALCARBON Requirements.

SOCIALCARBON Requirements for Avoiding Double Counting in the ICAO'S CORSIA and other Frameworks.

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Purpose

Greenhouse gas (GHG) emissions stemming from international civil aviation typically do not fall within the purview of countries' climate change mitigation commitments outlined in the United Nations Framework Convention on Climate Change (UNFCCC), the Kyoto Protocol, and the Paris Agreement. The Kyoto Protocol's Article 2.2 specifically mandated that countries collaborate through the International Civil Aviation Organization (ICAO) to tackle these emissions.

In the year 2010, ICAO adopted an ambitious objective of achieving carbon-neutral growth. This objective translates to maintaining global net carbon dioxide (CO2) emissions from international aviation at their 2020 levels. ICAO employs a range of measures to realize this objective, encompassing advancements in aircraft technologies, operational enhancements, and the promotion of sustainable aviation fuels. To address any residual emissions surpassing the 2020 baseline, ICAO introduced an offsetting initiative known as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) in 2016.

CORSIA requires that aircraft operators offset any increase in CO2 emissions from international flights between participating countries above the 2020 reference point. This is achieved through the procurement and subsequent retirement/cancellation of eligible emissions units.

For emissions units to qualify under CORSIA, they must adhere to specific eligibility criteria, known as the CORSIA Emissions Unit Eligibility Criteria (EUC). Consequently, carbon offset crediting programs seeking to provide carbon credits under CORSIA must demonstrate their compliance with these CORSIA Emissions Unit Eligibility Criteria. Programs that ICAO sanctions as eligible under CORSIA will be included in a publicly accessible list of CORSIA Eligible Emissions Unit Programs. Likewise, emissions units endorsed by ICAO as eligible under CORSIA will be featured in a published list of CORSIA Eligible Emissions Units.¹

¹ https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/CORSIA%20Eligible%20Emissions%20Units_March2023.pdf



A pivotal requirement outlined in the CORSIA Emissions Unit Eligibility Criteria is that carbon crediting programs establish and implement protocols to prevent the double counting of GHG emission reductions or removals. Similarly, the Paris Agreement calls for countries to steer clear of double counting. The avoidance of double counting holds paramount importance for environmental integrity, as it ensures that actual global GHG emissions do not exceed the cumulative reported emissions of individual countries or entities.

This document delineates the prerequisites for project proponents employing the SOCIALCARBON Standard to prevent double counting within the framework of CORSIA or other applicable frameworks.

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CORSIA Requirements for Avoiding Double Counting

The CORSIA Emissions Unit Eligibility Criteria, as adopted by the ICAO Council in March 2019², requires programs to put measures in place to avoid all three forms of double counting: double issuance, double use, and double claiming.

Avoidance of Double Counting, Issuance and Claiming

Carbon offset credit integrity assessment criteria

Programs should deliver credits that represent emission reductions, avoidance, or sequestration that are only counted once towards a mitigation obligation. Measures must be in place to avoid:

- a) Double issuance (which occurs if more than one unit is issued for the same emissions or emission reduction).
- b) Double use (which occurs when the same issued unit is used twice, for example, if a unit is duplicated in registries).
- c) Double claiming (which occurs if the same emission reduction is counted twice by both the buyer and the seller (i.e., counted towards the climate change mitigation effort of both an airline and the host country of the emission reduction activity). In order to prevent double claiming, eligible programs should require and demonstrate that host countries of emission reduction activities agree to account for any offset units issued as a result of those activities such that double claiming does not occur between the airline and the host country of the emission reduction activity.

Functionality of the SOCIALCARBON Registry

An essential factor in preventing any instances of double counting lies in the establishment of a resilient and open registry system, comprising a project repository. This repository should be accessible to the public, transparent, easy to navigate, and

² ICAO. (2019). CORSIA Emissions Unit Eligibility Criteria; ICAO. (2019b). International Civil Aviation Organization (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). Program Application Form, Appendix A. Supplementary Information for Assessment of Emissions Unit Programs. International Civil Aviation Organization (ICAO).



equipped with the requisite details crucial for preventing double counting within the CORSIA framework. The robust registry and database system must facilitate project registration, which includes assigning a distinct identifier to each project. This identifier can then be cross-referenced with the carbon credits issued within a carbon credit registry program, ensuring that project-specific information is readily identifiable for each carbon credit listed in the registry. SOCIALCARBON's registry platform is fully operational and possesses all the necessary functionalities and transparency to effectively prevent double counting within the CORSIA framework or similar frameworks related to double counting. These functionalities include³:

- 1. Securely and transparently recording and tracking the issuance, transfer, retirement and cancellation of carbon credits;
- Serialization and tagging of issuances so that each carbon credit is clearly
 associated with a specific project, country, issuance block and vintage and so
 that information for avoiding double counting can be assigned to each carbon
 credit;
- 3. Public, downloadable, sortable reports on all carbon credits including Projects, issuances, retirements and cancellations with project information including:
 - a. A description of the Project, including information on the mitigation technologies;
 - The emission sources, sinks, and reservoirs and greenhouse gases included in the calculation of the Project's GHG emission reductions or removals;
 - c. The Host Country and geographical location where the Project is implemented;
 - d. The Project Proponent(s);
 - e. The year(s) in which the GHG emission reduction/removal occurred (vintage);
 - f. Any other information needed for the Project to be unambiguously identified, and distinguished from other comparable projects in the same location;

³ Based on Field 5 of Table A5-7 from the first edition of the ICAO's Standards and Recommended Practices (SARPs)



- g. An indication whether the Project's mitigation activities and GHG emission reductions/removals are covered by the Host Country NDC targets (sector and target years) (for post 2020 credits);
- h. A Letter of Authorization from the Host Country, which will be posted on the registry once obtained (for post 2020 credits);
- Designation of the credits as Eligible for CORSIA once the Host Country Letter of Authorization has been obtained (for post 2020 credits); and
- Notice that the Host Country has applied an adjustment, once evidence obtained (for post 2020 credits).
- 4. Retirement and cancellation procedures that ensure the removal of the eligible unit are clearly indicated, irreversible, and unambiguously designated for an intended purpose. When eligible units are cancelled for CORSIA, the cancellation information will specify the aeroplane operator which the carbon credits were cancelled on behalf of, and the calendar year for which an offsetting requirement is fulfilled through the cancellation.

SOCIALCARBON Requirements

SOCIALCARBON's guidelines for preventing various forms of double counting are outlined comprehensively within the latest version of the SOCIALCARBON Standard, particularly related to corresponding adjustments and double issuance. Protocols are firmly established and operational to mitigate the risk of double issuance, double use and double claims related to greenhouse gas (GHG) emission reductions and removals, including alignment with the post-2020 Paris Agreement targets. The protocols currently in effect to prevent double issuance and double use will remain consistent for CORSIA. In this context, SOCIALCARBON presents a more detailed and precise set of requirements for avoiding double claims within the CORSIA framework and other frameworks.

To ensure the avoidance of double claiming in line with the progress toward mitigation targets as stated in countries' Paris Agreement Nationally Determined Contributions (NDCs), nations must grant authorization for the utilization of carbon credits by aircraft operators under CORSIA. Furthermore, they must provide assurances of reporting such usage to the United Nations Framework Convention on Climate Change (UNFCCC) and



implementing corresponding accounting adjustments. Subsequently, countries are obligated to report to the UNFCCC and execute adjustments as mandated by the UNFCCC. SOCIALCARBON will actively seek evidence confirming the fulfilment of these pledged adjustments.

For SOCIALCARBON emissions units designated as CORSIA-eligible by ICAO (based on factors such as project type, commencement date, vintage, etc.), a series of steps illustrated in the workflow depicted in Figure 1 below will be imperative to render these units eligible for utilization under CORSIA.

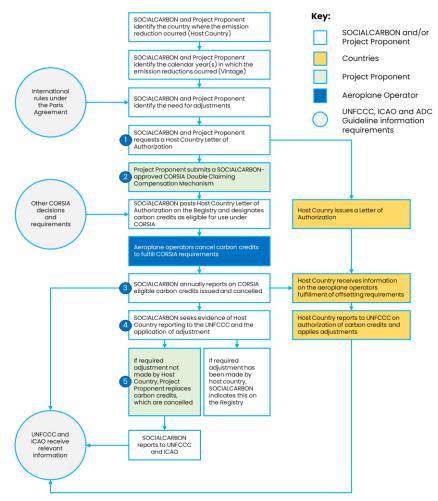


Figure 1: Steps for SOCIALCARBON Units to be designated by SOCIALCARBON as eligible for use in CORSIA

SOCIALCARBON intends to assign certain tasks, as outlined, to Project Proponents, with the understanding that SOCIALCARBON will assess and sanction all conclusions and

⁴ Diagram and procedures adapted from the "Guidelines on Avoiding Double Counting for the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)" by ClimateWorks Foundation, Meridian Institute, & Stockholm Environment Institute (2019).



relevant documentation. Additionally, this information and documentation will undergo scrutiny and validation by VVBs during the validation and verification procedures. Here are specifics for the steps indicated by the numbers in Figure 1.

1. The Host Country Letter of Authorization will be obtained from the country's UNFCCC Focal Point to designate post 2020 vintage units as eligible for CORSIA.

All Letters of Host Country Authorization will be publicly available on the registry and must be uploaded by either the project proponent or a member of the SOCIALCARBON team. Regarding post-2020 units, SOCIALCARBON will grant CORSIA eligibility status to carbon credits exclusively upon receipt of the aforementioned authorization letter. This eligibility will be limited to the extent specified within the received letter and is contingent upon the fulfilment of all additional prerequisites stipulated by SOCIALCARBON and CORSIA. These prerequisites encompass contributions to the SOCIALCARBON CORSIA Buffer Pool and adherence to the CORSIA Double Claiming Risk Mitigation Agreement, as elaborated below.

Note: Project developers are responsible for initiating the application process for the authorization letter, in compliance with their respective country's regulations and protocols.

A sample Letter of Authorization is included this document (See Appendix 1). The letter should explicitly⁵:

- a) Identify the specific Project, its name and location, and activity or group of project activities and acknowledge that the Project may reduce emissions and/or increase carbon removals in the country;
- b) Acknowledge that SOCIALCARBON has issued, or intends to issue, carbon credits for [a stated volume in tCO2e] emission reductions and/or removals that occur within the country;⁶

⁵ As recommended in section II.6.6.1 of the "Guidelines on Avoiding Double Counting for the Carbon Offsetting and Reduction Scheme for International Aviation" 2019.

⁶ As recommended by DEHSt (2019), to ensure consistency in UNFCCC reporting and assurance of adjustments for CORSIA units issued, if the GWP value used by a country in its NDC reporting (in particular in its first NDC report) is different than the value used by the Project utilising the SOCIALCARBON Standard to calculate the volume of carbon credits issued (e.g. the use the 100-year time horizon global warming potential (GWP) values from the 4th assessment report of the Intergovernmental Panel on Climate Change (IPCC) for emission reductions or removals that occur before 1 January 2021, versus the values from the 5th assessment report for emission reductions or removals that occur on or after 1 January 2021), SOCIALCARBON will convert the carbon credit volume to the volume that should be adjusted using the same GWP values the country uses in its NDC reporting and provide that number to the country.



- Authorize the use of the Project's GHG emission reductions and/or removals, issued as carbon credits, by aeroplane operators in order to meet offsetting requirements under CORSIA;
- d) Declare that the country will not employ the GHG emission reductions and/or removals linked to the Project to monitor advancement toward, or provide evidence of, the achievement of its Nationally Determined Contribution (NDC). Instead, the utilization of these reductions and removals by aircraft operators under CORSIA will be accurately reflected through the application of appropriate adjustments in the structured summary within the country's biennial transparency reports, as outlined in paragraph 77, sub-paragraph (d) of the Annex to decision 18/CMA.1. This approach shall align with the decisions established in 2/CMA.3 and any pertinent forthcoming determinations by the CMA.
- e) Establish the precise timing for the initial transfer, as it pertains to when a Corresponding Adjustment will be applied for alternative international mitigation purposes. This timing can be specified as either: 1) upon authorization, 2) upon issuance, or 3) upon the utilization or cancellation of the mitigation outcome, in accordance with the preferences of the participating Party; and
- f) Declare that the country will provide transparent reporting on both the authorization and utilization of the GHG emission reductions and/or removals from the Project for CORSIA (or by other countries). This reporting will be included in the country's biennial transparency report, as mandated by Article 13 of the Paris Agreement.

The letter may also encompass the following:

- a) Grant permission for the utilization of the GHG emission reductions and/or removals from the Project, which are issued as carbon credits, by other countries to contribute to their Nationally Determined Contributions (NDCs) and/or by voluntary market purchasers to support climate-related objectives.
- b) Specify a cap on the maximum quantity of the GHG emission reductions and/or removals from the Project, issued as carbon credits, that the nation consents to for use. This limitation may extend to defining the timeframe during which the country extends such authorization and may include additional usage restrictions (e.g., exclusive allocation for CORSIA).
- c) Include a request to SOCIALCARBON, seeking the provision of information regarding the utilization of the carbon credits to the country.



2. SOCIALCARBON mandates Project Proponents to establish a mechanism, known as a "compensation mechanism," designed to address, substitute, or otherwise reconcile situations where carbon units are utilized under CORSIA and concurrently claimed by the Host Country as progress toward fulfilling its Nationally Determined Contribution (NDC)⁷.

Project Proponents are obliged to present, in a format acceptable to SOCIALCARBON, a compensation mechanism devised to rectify instances of double claims involving GHG emission reduction and removal units. Such double claims may arise between aircraft operators engaged in CORSIA and host countries striving to achieve their NDC targets. Compensation becomes imperative if SOCIALCARBON cannot secure credible evidence confirming the adjustment within a year after the adjustment deadline prescribed for reporting to the UNFCCC by the Host Country.

Options include:

- a) Proof of implementing the necessary adjustment, as outlined in the Host Country Authorization Letter, within the host country's official reports to the UNFCCC. This can also be evidenced through entries in the Article 6 database or via alternative means, such as an irrevocable electronic certificate from the Host Country. This certificate should confirm that the mandated adjustments have been applied within the relevant accounting system and include a commitment to report these adjustments to the UNFCCC in the forthcoming reporting period. Only after this, can the units be made available for cancellation by an aircraft operator for CORSIA.8
- b) Provide a guarantee, in a format deemed acceptable by SOCIALCARBON⁹, that any units subject to double claiming (those for which an adjustment has not been executed) will be substituted with a quantity of ICAO-eligible credits equivalent to

⁷ As recommended in section II.6.7.2 of the "Guidelines on Avoiding Double Counting for the Carbon Offsetting and Reduction Scheme for International Aviation" 2019.

⁸ The choice to permit an irrevocable electronic certificate is applicable solely during intervals between UNFCCC reporting periods and exclusively when a Host Country possesses a sturdy GHG accounting system equipped with features such as a distributed ledger registry technology. This technology enables the real-time, transparent, unalterable, and irreversible recording of transaction information. In cases where adjustments are substantiated through an entry in the Article 6 database or by means of an irrevocable electronic certificate, SOCIALCARBON mandates that the particulars of the adjustment must also find their way into the host country's reports to the UNFCCC in the subsequent reporting period.

⁹ Any guarantee must be legally secure and binding, and it should be offered by a highly reputable third party. This third party could be either a sovereign entity or a corporation with an exceptional rating, such as a high grade or prime rating assigned by Moody's, S&P, and/or Fitch. Furthermore, the guarantee should incorporate sufficient remedies to address the project proponent's expenses related to replacement units in the event of a default.



the number of units doubly claimed by the Host Country. This substitution, known as the "Replacement Units," necessitates the use of SOCIALCARBON units or comparable CORSIA-eligible units sanctioned by SOCIALCARBON, which have not been previously sold or otherwise committed.

The Project Proponent is required to effectuate the cancellation of the corresponding Replacement Units to rectify the Host Country's dual claim of GHG emission reductions and/or removals. Subsequently, evidence of this cancellation must be provided to SOCIALCARBON. This guarantee can originate from a reputable third-party entity, such as the Multilateral Investment Guarantee Agency (MIGA), or from an insurance mechanism approved by SOCIALCARBON.

c) Participation in the SOCIALCARBON CORSIA Double Claiming Buffer Pool and adherence to the CORSIA Double Claiming Risk Mitigation Agreement, which outlines the Project Proponent's obligation to substitute the double-claimed credits with a volume of replacement CORSIA-eligible credits corresponding to the quantity of units doubly claimed by the Host Country. These replacement units should consist of SOCIALCARBON units that have not been previously sold or otherwise committed, or other CORSIA-eligible credits as sanctioned by SOCIALCARBON. SOCIALCARBON will proceed to annul the associated Replacement Units in order to rectify the Host Country's double claim of GHG emission reductions and/or removals. All procedures will be conducted through the SOCIALCARBON Registry. The SOCIALCARBON CORSIA Double Claiming Buffer Pool will be publicly available, with any cancellation of CORSIA Double Claiming Buffer Credits or Replacement Credits being publicly disclosed.

The CORSIA Double Claiming Buffer Pool ("CORSIA Buffer Pool") contribution volume will be a percentage of the Project's credits as determined by the published Organization for Economic Co-Operation (OECD) <u>Prevailing Country Risk Classification</u> of the Host Country at the time of requesting CORSIA-eligible designation for the units¹⁰, whereby a rating of 0-2 = 10% contribution, 3-4 = 20% contribution, 5-6 = 30% contribution and 7 = 40% contribution. Buffer pool contributions will be refunded once the corresponding adjustment has been applied.

¹⁰ Approach adapted from ACR Standard v8.0



3. SOCIALCARBON Annual Reporting on the eligibility designation and use of Units for CORSIA.

SOCIALCARBON will release annual reports that present consolidated data pertaining to the issuance, CORSIA-eligible certification, and cancellation of carbon credits¹¹. These reports will be made available within six (6) months following the conclusion of a calendar year. They will be disseminated to both ICAO and all the countries where the GHG emission reductions and/or removals linked to the issued and CORSIA-eligible carbon credits were applicable. The reported information will encompass:

- a) The volume of CORSIA-eligible carbon credits issued per country, delineated by calendar year, along with quantities cancelled for CORSIA purposes and those cancelled for other uses.
- b) The quantity of CORSIA-eligible carbon credits cancelled by aircraft operators for each CORSIA compliance period.
- c) The maximum number GHG emission reductions and/or removals originating from SOCIALCARBON projects, as authorized by countries for utilization by other countries or entities. This data will be presented on a country-by-country basis, and each entry will correspond to the specific calendar year.

4. Obtaining evidence of the application of adjustments¹².

SOCIALCARBON will take action to obtain evidence regarding the appropriate implementation of adjustments from the Host Country, concerning GHG emission reductions and/or removals as outlined in the country's biennial transparency reports submitted to the UNFCCC. These reports should unequivocally cite the carbon credits being addressed (e.g., by referencing unique identifiers, serial numbers, or making specific mention of the authorization letter) for which the country has executed the necessary adjustments. Once the requisite evidence has been secured, SOCIALCARBON will proceed to publish this evidence on the SOCIALCARBON registry, along with an indication that the adjustment has been successfully enacted.

¹¹ As recommended in section II.9 of the "Guidelines on Avoiding Double Counting for the Carbon Offsetting and Reduction Scheme for International Aviation" 2019.

¹² As recommended in section II.6.7 of the "Guidelines on Avoiding Double Counting for the Carbon Offsetting and Reduction Scheme for International Aviation" 2019.



5. Resolution for CORSIA Double Claim.

If the required adjustment is not executed or credible evidence cannot be obtained within a year after the adjustment was scheduled for reporting to the UNFCCC by the Host Country, the Project Proponent is obligated to rectify the double-claimed quantity through its chosen compensation mechanism.

SOCIALCARBON will duly notify both the UNFCCC and ICAO of this situation. Furthermore, SOCIALCARBON will assess potential modifications to the country's risk categorization or contemplate the suspension of CORSIA eligibility designation for carbon credits originating from the affected country.



References

- ClimateWorks Foundation, Meridian Institute, & Stockholm Environment Institute.
 (2019). Guidelines on Avoiding Double Counting for the Carbon Offsetting and
 Reduction Scheme for International Aviation (CORSIA). Washington D.C.
- German Emissions Trading Authority (DEHSt). (2019). Avoiding double counting between CORSIA and Nationally Determined Contributions Options for accounting under the Paris Agreement.
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- International Civil Aviation Organization. (2023). CORSIA Standards and Recommended Practices (SARPs): https://www.icao.int/environmentalprotection/CORSIA/Pages/SARPs-Annex-16-Volume-IV.aspx
- UNFCCC. (2019a). Decision X/CMA.1. Matters relating to Article 6 of the Paris Agreement. United Nations Framework Convention on Climate Change (UNFCCC).
- UNFCCC. (2019b). Draft CMA decision on guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement.
- Winrock International (2023). American Carbon Registry Standard v8.0.



Appendix 1

Example host country letter of authorization

DATE:

TO: Social Carbon Foundation

FROM: UNFCCC Focal Point, Government of Country X

RE: Letter of authorization related to GHG project Y

With regard to project Y, as described in the project documentation attached to this letter, we hereby acknowledge that the project may reduce greenhouse gas emissions in country X by [describe activity] and that SOCIALCARBON has issued, or intends to issue, carbon credits for these GHG emission reductions/removals.

We hereby authorize that the project's GHG emission reductions/removals, issued as carbon credits by SOCIALCARBON, may be used by aeroplane operators to meet offsetting requirements under CORSIA [optional: or by other countries towards achieving their NDC and/or by voluntary market buyers towards climate targets,] subject to the following restrictions:

- We authorize only the use of the project's GHG emission reductions/removals, for which SOCIALCARBON has issued or will issue carbon credits, that occur in the period from [DATE] to [DATE];
- We authorize only the use of a maximum of [#] tCO2e of the project's GHG emission reductions/removals, issued as carbon credits by SOCIALCARBON, for each calendar year;
- We authorize the use of the GHG emission reductions and/or removals only for [NAME RESTRICTIONS ON USE]; and
- We acknowledge our definition of "first transfer" in terms of when we will apply a Corresponding Adjustment for other international mitigation purposes upon [SPECIFY



ONE OF THE FOLLOWING: 1) authorization, 2) issuance or 3) the use or cancellation of the mitigation outcome, as specified by the participating Party].

We hereby request SOCIALCARBON to submit annual reports to us, no later than by 31 March of each year, on the actual issuance of carbon credits, as well as the use of the carbon credit's associated GHG emission reductions/removals by other countries or entities, including volumes cancelled for use by each country and entity.

We hereby declare that country X will not use the project's GHG emission reductions/removals to track progress towards, or for demonstrating achievement of, its NDC and that country X will account for the use of the project's GHG emission reductions/removals by aeroplane operators under CORSIA or by other countries through adjustments in the structured summary of country X's biennial transparency reports, as referred to in paragraph 77, sub-paragraph (d), of the Annex to decision 18/CMA.1, and consistent with relevant future decisions by the CMA.

We hereby also declare that country X will report on the authorization and use of the project's GHG emission reductions/removals by other countries or entities in a transparent manner in the country's biennial transparency report submitted under Article 13 of the Paris Agreement.