



# **GUIDELINES ON AVOIDING DOUBLE COUNTING FOR THE CARBON OFFSETTING AND REDUCTION SCHEME FOR INTERNATIONAL AVIATION**

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These Guidelines are a product of the Avoiding Double Counting Working Group which was convened and funded by Climate Works Foundation. Meridian Institute provided facilitation and logistical support, and subject matter expertise was provided by the Stockholm Environment Institute.



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# ABOUT THESE GUIDELINES

These Guidelines are intended to facilitate the avoidance of double counting of greenhouse gas (GHG) emission reductions under the [Carbon Offsetting and Reduction Scheme for International Aviation \(CORSIA\)](#), adopted by the [International Civil Aviation Organization \(ICAO\)](#) in 2016. The Guidelines aim to help entities that manage carbon offset-crediting programs (hereafter referred to as “programs”), as well as project owners, governments, non-governmental organizations, and other stakeholders, identify how and under which conditions double counting can occur, and offer guidance and good practice examples for avoiding different forms of double counting. The Guidelines could also inform the wider implementation of carbon market approaches, including in the context of the [Paris Agreement](#).

The Guidelines were developed through a multi-stakeholder consensus decision-making process, by a working group consisting of representatives of the [American Carbon Registry](#), [Carbon Market Watch](#), [Climate Action Reserve](#), [Environmental Defense Fund](#), the [Gold Standard Foundation](#), the [International Emissions Trading Association](#), [Verra](#), and the [World Wildlife Fund](#), with critical input from outside experts. The “Avoiding Double Counting (ADC) Working Group” defined consensus as no dissent. The entire content of the Guidelines reflects a consensus outcome of the ADC Working Group, with an important exception: ADC Working Group members [Carbon Market Watch](#), [Environmental Defense Fund](#), and [World Wildlife Fund](#) stress that while paragraph 77d in the Annex to Decision 18/CMA.1 on “Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement” and paragraph 17 of Decision 4/CMA.1

on “Further guidance in relation to the mitigation section of decision 1/CP.21” provide important foundational elements for avoiding double counting, application of these CMA Decisions: a) does not necessarily represent best practice, b) may not be sufficient to avoid all forms of double counting, and c) could be undermined by future CMA decisions. For example, if the CMA were, in the future, to decide that Parties need not make corresponding adjustments when authorizing the use, for purposes other than towards NDCs, of credits issued for emissions reductions and removals originating outside the scope of NDCs, such a decision, in the view of these Working Group members, would allow double counting of mitigation efforts with CORSIA, undermining CORSIA’s environmental integrity. In such a case, these Working Group members would object to the use of such double counted credits for CORSIA compliance even though the Guidelines could be interpreted to allow such use.

A complete list of the members of the ADC Working Group can be found in Annex III.1. The [ClimateWorks Foundation](#) initiated the working group process, provided financial support, and participated in ADC Working Group deliberations. The [Meridian Institute](#) served as co-convenor of the ADC Working Group, facilitated the meetings of the working group and assisted the group to achieve a consensus outcome. The [Stockholm Environment Institute](#) supported the process through the involvement of Derik Broekhoff and Lambert Schneider, two subject matter experts who prepared an initial options paper, followed by successive drafts of the Guidelines based on substantive inputs from Working Group members.

Avoiding Double  
Counting Working Group





# EXECUTIVE SUMMARY

In 2016, the Assembly of the International Civil Aviation Organization (ICAO) established the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to help achieve its aspirational goal of carbon-neutral growth starting in 2021. Under the CORSIA, aeroplane operators will be required to purchase eligible emissions units to meet their carbon offsetting requirements. Carbon offset-crediting programs (hereinafter referred to as “programs”) that wish to provide offset credits for use under CORSIA must be approved by the ICAO Council. One of the criteria for approval is that programs have rules and procedures in place to avoid double counting with respect to these offset credits. These Guidelines intend to assist programs in establishing or revising relevant program documents – such as standards, procedures, guidelines and forms – in order to implement good practices and satisfy the provisions for avoiding double counting under CORSIA.

These Guidelines can also be informative for other users, including project owners, governments, aeroplane operators, civil society organizations, and other stakeholders. The Guidelines provide guidance and good practice examples of the actions that these third parties may need to take in order to satisfy double-counting-related requirements under CORSIA. In addition, the Guidelines can inform the ongoing negotiations on, and the subsequent implementation, of the Paris Rulebook. While these Guidelines focus on avoiding double counting in the context of the CORSIA, many aspects are also relevant if offset credits are used for other purposes, such as for achieving nationally determined contributions (NDCs) under the Paris Agreement.

The Guidelines were developed through a multi-stakeholder consensus decision-making process, by a working group consisting of representatives of the American Carbon Registry, Carbon Market Watch, the Climate Action Reserve, the Environmental Defense Fund, the Gold Standard Foundation, the International Emissions Trading Association, Verra, and the World Wildlife Fund, with critical input from outside experts.

Double counting can occur in three ways: (1) double issuance of emissions units; (2) double use of emissions units; and (3) double claiming of the same emission reductions or removals by both the country in which the emission reductions or removals occur and an aeroplane operator using emission units under CORSIA. These Guidelines identify policies, standards, procedures, and operational capabilities that programs should adopt to address all three types of double counting.

Several issues are not addressed in these Guidelines: whether and how double counting should be avoided in the period up to 2020; whether and how offset credits issued for emission reductions or removals that are not covered by NDC targets should be accounted for; potential double counting issues that could arise in relation to other international frameworks that contribute to mitigating climate change, such as under the International Maritime Organization; whether and how NDC targets in non-GHG metrics should be accounted for; and potential double counting issues that arise from the use of lower carbon aviation fuels or sustainable aviation fuels. Likewise, voluntary climate action is outside the scope of these Guidelines. Some of these issues may be addressed in future revisions to these Guidelines.

## INCORPORATION OF THESE GUIDELINES IN PROGRAM DOCUMENTS AND OPERATIONS

Programs should incorporate the provisions set forth in these Guidelines into their relevant program documents and operations (section II.2). The relevant program documents typically include standards, procedures, guidelines and forms.

## FUNCTIONAL CAPABILITIES OF PROGRAM REGISTRY AND PROJECT DATABASE SYSTEMS

Programs should administer robust registry and project database systems that support offset credit issuance, transfer, and cancellation functions, and make relevant information on projects and offset credits publicly available (section II.3). In particular, a program's offset credit registry system should be capable of securely and transparently effectuating the issuance, transfer, and cancellation of offset credits; allow the tagging of each offset credit with a unique identifier (e.g., serial number) so that information relevant for avoiding double counting can be assigned to each offset credit; make relevant information on offset credits available to users and the public; and incorporate offset credit cancellation procedures that ensure that cancellation is clearly indicated, irreversible, and unambiguously designated for an intended purpose.

## USE OF GLOBAL WARMING POTENTIALS

To convert emissions of greenhouse gases other than CO<sub>2</sub> into CO<sub>2</sub> equivalents, programs should use the 100-year time-horizon global warming potential (GWP) values from the 4<sup>th</sup> assessment report of the Intergovernmental Panel on Climate Change (IPCC) for emission reductions or removals that occur *before* 1 January 2021, and the values from the 5<sup>th</sup> assessment report for emission reductions or removals that occur on or *after* 1 January 2021 (section II.4).

## AVOIDING DOUBLE ISSUANCE

To avoid double issuance, programs should adopt a series of standards and procedures (section II.5), including protocols for offset credit issuance that ensure that offset credits are only issued after final program approval of verification reports and any other supporting documentation related to a project's asserted emission reductions or removals; quantification standards and project eligibility criteria that ensure that different projects cannot be issued credits for the same emission reductions or removals; and standards and procedures that avoid double issuance due to double registration of projects (both within the same registry system and across multiple registries).

## AVOIDING DOUBLE CLAIMING WITH CLIMATE CHANGE MITIGATION UNDER THE PARIS AGREEMENT

To avoid double claiming with climate change mitigation under the Paris Agreement (section II.6), these Guidelines recommend a series of steps to be taken by both programs and countries (see Figure ES-1). To effectively avoid such double claiming, countries need to account for offset credits used by aeroplane operators. Using the terminology of the Paris Agreement, these Guidelines refer to "adjustments" as the effective bookkeeping entries that countries use to account for the use of an offset credit under CORSIA. Programs should adopt standards and procedures that will provide transparency on the use of offset credits under CORSIA and facilitate the transparent application of adjustments by countries.

To facilitate the transparent application of adjustments, as well as transparent reporting by countries on the use of offset credits under CORSIA, programs should adopt standards and procedures to identify for each offset credit:

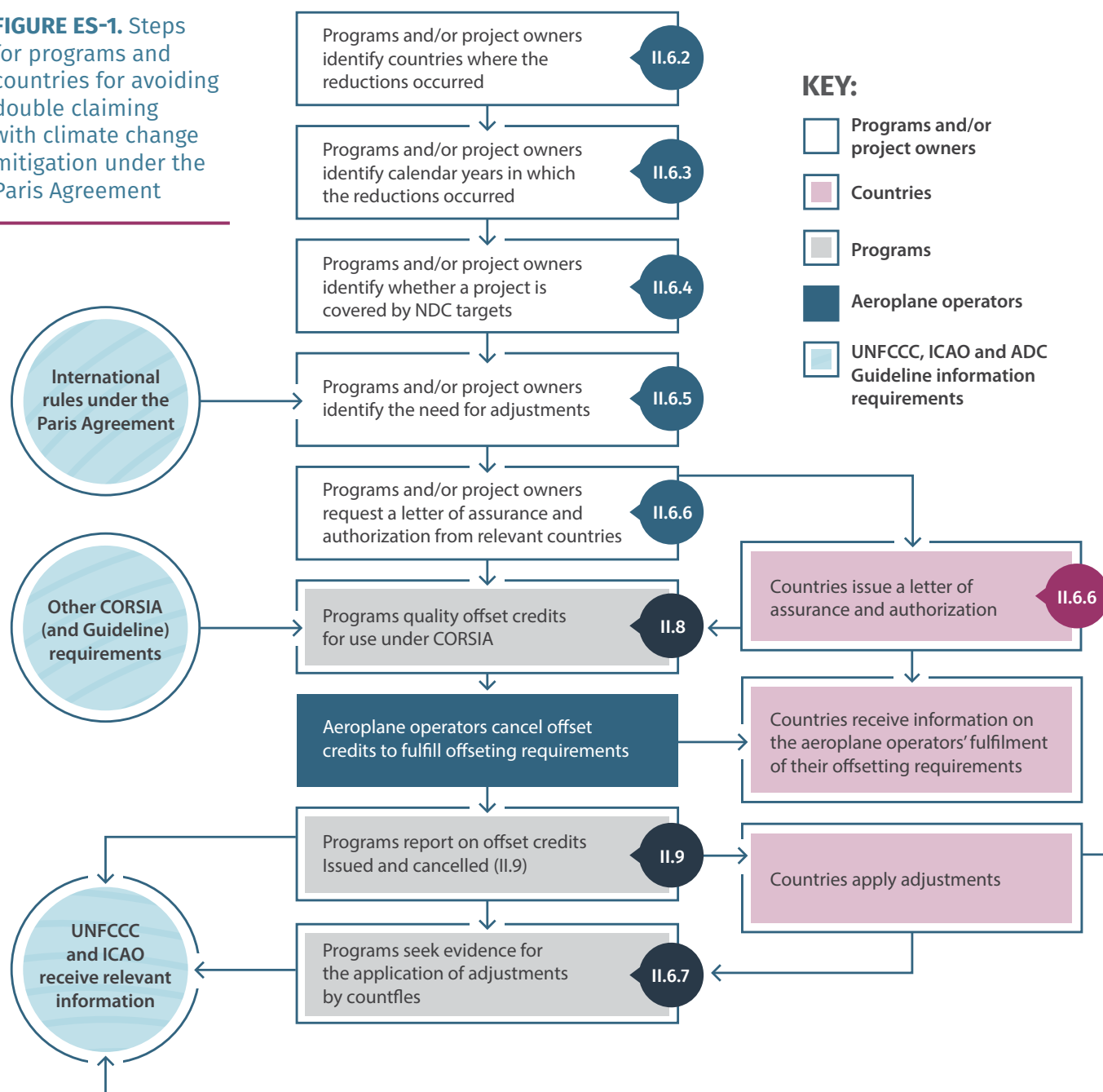
- ▶ The country (or countries) in which emission reductions/removals occurred;
- ▶ The calendar years in which the emission reductions/removals occurred;
- ▶ Whether associated project activities and/or emission reductions/removals are covered by NDC targets;
- ▶ Whether an adjustment is needed to avoid double claiming with regard to the use of the offset credits under CORSIA.

Relevant NDC targets should include GHG targets, including absolute, relative, or intensity-based GHG emissions targets. These targets should be identified regardless of whether a project's associated emission reductions or removals are *covered* or *not covered* by these targets. Relevant NDC targets should also include targets expressed in non-GHG metrics, such as renewable energy targets or energy efficiency targets. These targets only need to be identified *if* the project's implementation affects progress towards achieving the target (e.g. it involves or affects activities covered by the target).

Programs should also clearly specify which time period is considered applicable for assessing whether a project and its associated emission reductions or removals are covered by NDC targets. If relevant decisions under the Paris Agreement specify the time periods that are applicable for avoiding double counting for different types of NDC targets, then programs should apply these time periods. If relevant decisions under the Paris Agreement do not specify the

applicable time periods, then programs should use the time periods communicated by countries in their NDCs or, if these are not available, use a time period that extends from 2021 until the year for which the target is specified (e.g., 2025 or 2030). Emission reductions or removals that occur outside the identified time period(s) should be treated as *not covered*, even if they occur at sources or sinks otherwise included within relevant NDC targets.

**FIGURE ES-1.** Steps for programs and countries for avoiding double claiming with climate change mitigation under the Paris Agreement





As it will take some time until countries will apply and report on adjustments – because the relevant accounting systems still have to be developed and implemented and because the first biennial transparency reports under Article 13 may only be submitted in 2024 – the Guidelines envision that countries can, as long as this does not infringe future decisions under the Paris Agreement, publicly declare in a “letter of assurance and authorization” that they will apply relevant adjustments later. These letters should, inter alia:

- ▶ Authorize the use of the project’s emission reductions or removals, issued as offset credits, by aeroplane operators in order to meet offsetting requirements under CORSIA;
- ▶ Declare that the country will not use the project’s associated emission reductions or removals to track progress towards, or for demonstrating achievement of, its NDC and will account for their use by aeroplane operators by applying relevant adjustments.

Once such a letter is received, programs may qualify offset credits from projects referenced in the letter for use under CORSIA, as long as all other CORSIA requirements and provisions in these Guidelines have been met.

Finally, programs should establish procedures to follow up on whether countries have applied adjustments.

## AVOIDING DOUBLE CLAIMING WITH MANDATORY DOMESTIC MITIGATION TARGETS

Programs should also adopt standards and procedures to avoid double claiming with mandatory domestic climate change mitigation targets (section II.7). In general, programs may address potential double counting or overlap related to these targets through any of the following options:

- ▶ Requiring that, if offset credits are associated with activities or emission reductions/removals covered by these targets, the activities or emission reductions/removals are not counted towards achievement of the targets;
- ▶ Not issuing offset credits for activities or emission reductions or removals that are covered by the targets; or
- ▶ Not qualifying offset credits for use under CORSIA if the associated activities or emission reductions or removals are covered by the targets.

## PROCEDURE FOR THE QUALIFICATION OF OFFSET CREDITS FOR USE UNDER CORSIA

If a program intends to issue, or has already issued, offset credits for which not all double counting requirements set out in these Guidelines are initially satisfied (e.g. because meeting such requirements is not necessary for their use outside of CORSIA), then the program should establish a procedure under which project owners or offset credit holders can request that offset credits be qualified for meeting offsetting requirements under the CORSIA (section II.8). The procedure should ensure that offset credits are not qualified by a program for use under CORSIA unless all CORSIA-related program requirements have been satisfied. The fulfilment of program requirements should be demonstrated through appropriate supporting documentation that is made publicly available.

## PROGRAM REPORTING TO SUPPORT TRANSPARENCY

To facilitate transparency, these Guidelines establish provisions for programs to report on the issuance and use of offset credits (section II.9). Annually reported information should include, at a minimum:

- ▶ Total issued offset credits by country, calendar year, and the need for application of adjustments;
- ▶ Total cancelled offset credits by aeroplane operator; and
- ▶ The maximum number of emission reductions or removals, from projects registered with the program, authorized by countries for use by other countries or entities, by country and calendar year.

The regular publication of reports with aggregated information can facilitate the avoidance of all forms of double counting, and assist countries in applying adjustments. In addition, program reporting can assist countries to track more generally the use of a project’s emission reductions or removals by other countries or entities, and to report the authorization and use of the emission reductions or removals in conjunction with national inventory reports.



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# DEFINITIONS

The following definitions apply under these Guidelines. These definitions are based on definitions commonly used in the context of carbon markets as well as on ICAO's Standards and Recommended Practices (SARPs).<sup>1</sup>

|                          |   |
|--------------------------|---|
| <b>Accounting system</b> | Systems and procedures used by a country for tracking progress towards climate change mitigation and towards achieving NDCs. An accounting system includes systems and procedures to report and account for international transfers and the use of <b>offset credits</b> under CORSIA through the application of <b>adjustments</b> , as applicable. Decisions under the Paris Agreement refer to a “structured summary” to apply such <b>adjustments</b> (paragraph 77d in the Annex to decision 18/CMA.1 on “Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement” and paragraph 17 of decision 4/CMA.1 on “Further guidance in relation to the mitigation section of decision 1/CP.21”).   |
| <b>Adjustment</b>        | A bookkeeping entry that a country makes in its <b>accounting system</b> to avoid double counting with regard to an <b>offset credit used</b> under CORSIA. <b>Adjustments</b> for the use of <b>offset credits</b> under CORSIA are applied as an addition to the country's reported GHG emissions and removals covered by its NDC.  |
| <b>Allowance</b>         | An <b>emissions unit</b> that is issued to an electronic registry under an emissions trading system and constitutes a permit to emit one metric tonne of CO <sub>2</sub> equivalent.  |
| <b>Cancellation</b>      | The permanent removal and single use of an <b>emissions unit</b> in an electronic <b>registry</b> designated by a <b>program</b> . Cancellation may occur for different purposes, including for compliance purposes such as demonstrating the achievement of <b>offsetting requirements</b> by aeroplane operators under CORSIA; for voluntary purposes such as voluntary offsetting of emissions; or for other purposes such as addressing any previous excess issuance, or to remove offset credits from one program so that emissions units may be issued under another program for the same emission reductions or removals. The use of <b>emissions units</b> for meeting compliance requirements or voluntary goals is sometimes also referred to as “retirement.” The term “cancellation” here includes all permanent removals, independent of the purpose of the removal, and thus encompasses “retirements.” |
| <b>Double counting</b>   | A situation in which a single greenhouse gas emission reduction or removal is counted more than once towards achieving climate change mitigation. Double counting can occur through double issuance, double use, and double claiming.   |
| <b>Double issuance</b>   | A situation in which more than one <b>emissions unit</b> is issued for the same emissions or emission reductions. This leads to double counting if more than one of these <b>emissions units</b> is counted towards achieving climate change mitigation. Some <b>programs</b> and stakeholders also refer to <i>double registration</i> – the registration of the same <b>project</b> under two different programs or twice under the same program. Double registration can lead to double issuance if <b>programs</b> do not implement proper controls to ensure that, if a project is registered with more than one program, offset credits are cancelled by one program before offset credits are issued by another program for the same emission reductions or removals.  |
| <b>Double use</b>        | A situation in which the same <b>emissions unit</b> is counted twice towards achieving climate change mitigation. This could, for example, occur if an aeroplane operator would use a single <b>emissions unit cancellation</b> to fulfil <b>offsetting requirements</b> for two different compliance periods.  |
| <b>Double claiming</b>   | A situation in which the same emission reduction or removal is claimed by two different entities towards achieving climate change mitigation: once by the country in which the emission reduction or removal occurs, and once by the country or entity using an <b>emissions unit</b> , such as an aeroplane operator under CORSIA.   |

<sup>1</sup> First Edition of Annex 16 — Environmental Protection, Volume IV — Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). <https://www.icao.int/environmental-protection/CORSIA/Pages/SARPs-Annex-16-Volume-IV.aspx>

|   |  |
|---|--|
| <b>Emissions unit</b>                     | An electronic unit denominated as one metric tonne of CO <sub>2</sub> e that is issued by a <b>program</b> to a <b>registry</b> . Emissions units can include <b>offset credits</b> or allowances.   |
| <b>NDC target</b>                         | A <b>target</b> communicated by a country in its nationally determined contribution (NDC) under the Paris Agreement.   |
| <b>Offset credit</b>                      | An <b>emissions unit</b> that is issued by a <b>program</b> and represents an emission reduction or removal of one metric tonne of CO <sub>2</sub> (or its equivalent). Offset credits must be issued, tracked, and cancelled by means of an approved <b>registry</b> .  |
| <b>Offsetting requirement</b>             | The number of <b>emissions units</b> an aeroplane operator is obliged to <b>cancel</b> for a given three-year compliance period in order to meet its requirements under CORSIA.  |
| <b>Program</b>                            | A carbon offset-crediting program that determines emission reductions or removals from <b>projects</b> and issues <b>offset credits</b> for such reductions or removals. Once a program has been approved by ICAO's Council as eligible for CORSIA, the program may qualify <b>offset credits</b> for use by aeroplane operators to meet their <b>offsetting requirements</b> under CORSIA.  |
| <b>Program documents</b>                  | Documentation that establishes standards, procedures, guidelines, and forms that are used or applied in the context of a <b>program's</b> operations, including with regard to submittal, validation, and registration of <b>projects</b> ; monitoring and verification of emission reductions; approval and revision of quantification standards; accreditation and performance assessment of validation and verification entities; and issuance, transfer, and <b>cancellation of offset credits</b> . |
| <b>Project</b>                            | An activity that reduces emissions or enhances removals of greenhouse gases and to which a <b>program</b> issues <b>offset credits</b> . Relevant activities can include single projects, programmatic approaches or sectoral approaches (which are all referred to in these Guidelines as "projects").  |
| <b>Project owner</b>                      | The legal entity (individual or organization) that represents a <b>project</b> to a <b>program</b> for the purpose of obtaining <b>offset credits</b> .  |
| <b>Quantification standards</b>           | Standards, tools, and other documents established by a <b>program</b> to quantify a <b>project's</b> net emission reductions or removals, including baseline, monitoring, and verification methodologies.  |
| <b>Registration</b>                       | The formal acceptance and approval of a <b>project</b> by a <b>program</b> , based on the <b>project</b> meeting all relevant <b>program</b> requirements. Registration is required before a <b>program</b> can issue <b>offset credits</b> to a <b>project</b> .  |
| <b>Registry</b>                           | An electronic system for the issuance, transfer, and <b>cancellation of emissions units</b> . Some <b>programs</b> use the term "registry" to refer to both an <b>emissions unit</b> database and <b>project</b> database (containing information on <b>projects</b> ), which may be interlinked. These Guidelines distinguish these functions, and apply the term "registry" only to an electronic system for the issuance, transfer, and <b>cancellation of emissions units</b> .                      |
| <b>Target</b>                             | A climate change mitigation goal that is expressed as a quantitative outcome. Targets may be expressed in different metrics and include <b>GHG targets</b> (e.g., absolute GHG emissions targets) and <b>targets in non-GHG metrics</b> (e.g., renewable energy targets).  |
| <b>GHG target</b>                         | A target that is expressed as a quantity of GHG emissions or removals, or a quantity of GHG emissions or removals relative to an indicator, such as GHG emissions per gross domestic product or GHG emissions relative to a business-as-usual emissions path.  |
| <b>Targets in non-GHG metrics</b>         | A target that is expressed in a metric other than GHG emissions or removals, such as a quantity of renewable energy generation or energy savings.  |
| <b>Validation and verification entity</b> | An independent third-party entity that assesses whether a <b>project</b> requesting <b>registration</b> conforms with all <b>program</b> requirements (often referred to as "validation") and whether a request for issuing <b>offset credits</b> conforms with all <b>program</b> requirements (often referred to as "verification").   |



# INTRODUCTION

## I.1 BACKGROUND

Greenhouse gas (GHG) emissions from international civil aviation are typically not included in countries' climate change mitigation targets under the United Nations Framework Convention on Climate Change (UNFCCC), its Kyoto Protocol, and its Paris Agreement, but are reported by countries separately in GHG emission inventories. Article 2.2 of the Kyoto Protocol mandated countries to work through the International Civil Aviation Organization (ICAO) to address these emissions.

In 2010, ICAO adopted an aspirational goal of carbon-neutral growth, meaning that global net carbon dioxide (CO<sub>2</sub>) emissions from international aviation should be frozen at their 2020 levels.<sup>2</sup> ICAO pursues a basket of measures to achieve this goal, including improved aircraft technologies, operational improvements, and sustainable aviation fuels. To address any remaining emissions above 2020 levels, ICAO adopted an offsetting scheme – the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).<sup>3</sup>

CORSIA requires aeroplane operators to offset any increase of CO<sub>2</sub> emissions from international flights between participating countries above a 2020 baseline, through the purchase and cancellation of eligible emissions units.

For emissions units to be eligible under CORSIA, they must comply with eligibility criteria, referred to as the CORSIA Emissions Unit Eligibility Criteria, and, accordingly, carbon offset-crediting programs that wish to provide offset credits under CORSIA must demonstrate that the offset credits meet the CORSIA Emissions Unit Eligibility Criteria. Carbon offset-crediting programs that are approved by ICAO as eligible under CORSIA will be included on a published list of CORSIA Eligible Emissions Unit Programs. Likewise, emissions units approved by ICAO as eligible under CORSIA will be included on a published list of CORSIA Eligible Emissions Units.

A key requirement under the CORSIA Emissions Unit Eligibility Criteria is that carbon offset-crediting programs have in place rules and procedures to avoid the double counting of emission reductions. The Paris Agreement likewise requires countries to avoid double counting. Avoiding double counting is essential for environmental integrity, because if double counting occurs, actual global GHG emissions will be higher than the sum of what individual countries or entities report their emissions to be.

This document presents guidelines that carbon offset-crediting programs can apply in order to fulfill the requirements for avoiding double counting in the CORSIA Emissions Unit Eligibility Criteria (hereinafter referred to as "Guidelines").<sup>4</sup>

This draft of the Guidelines is based on the information included in the first edition of the SARPs relating to CORSIA which were adopted by the ICAO Council in June 2018 and the CORSIA Emissions Unit Eligibility Criteria which were adopted by the ICAO Council in March 2019<sup>5</sup>. The current SARPs still need to be complemented by further elements to fully operationalize CORSIA. Moreover, the SARPs are kept under periodic review in light of developments under the UNFCCC and the Paris Agreement, as specified in ICAO Assembly Resolution 39-3. Furthermore, this draft of the Guidelines takes into account the decisions adopted by the first Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) in Katowice in December 2018: decision 18/CMA.1 on the "Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement," decision 4/CMA.1 on "Further guidance in relation to the mitigation section of decision 1/CP.21," and decision 6/CMA.1 on "Common time frames for nationally determined contributions referred to in Article 4, paragraph 10, of the Paris Agreement." Annex III.5 provides text elements

<sup>2</sup> ICAO Assembly Resolution A37-19, [https://www.icao.int/environmental-protection/37thAssembly/A37\\_Res19\\_en.pdf](https://www.icao.int/environmental-protection/37thAssembly/A37_Res19_en.pdf)

<sup>3</sup> ICAO Assembly Resolution A39-22/2, [https://www.icao.int/Meetings/a39/Documents/WP/wp\\_530\\_en.pdf](https://www.icao.int/Meetings/a39/Documents/WP/wp_530_en.pdf)

<sup>4</sup> While ICAO's Committee on Environmental Protection developed the CORSIA Emissions Units Eligibility Criteria and those criteria were approved by ICAO's governing body, the ICAO Council, these Guidelines were not prepared by ICAO. The stakeholders that contributed to developing these Guidelines are identified in Annex III.1.

<sup>5</sup> <https://www.icao.int/environmental-protection/CORSIA/Documents/ICAO%20document%2009.pdf>

from these decisions that are particularly relevant for these Guidelines. It should be noted that the Parties have not yet agreed on relevant decisions on market-based approaches under Article 6 of the Paris Agreement.

The Guidelines presented here are a first version. They may be updated in the future considering any new SARPs adopted or amended under ICAO or any decisions adopted by the CMA, in order to support consistency between these Guidelines and decisions under ICAO and the Paris Agreement.

## 1.2 INTENDED USE OF THESE GUIDELINES

These Guidelines are written for carbon offset-crediting programs (hereinafter referred to as “programs”). The Guidelines are intended to assist programs in establishing or revising relevant program documents – such as standards, procedures, guidelines and forms – in order to implement good practices and satisfy the provisions for avoiding double counting in the CORSIA Emissions Unit Eligibility Criteria.

The working group that has produced these Guidelines recommends that these Guidelines be used by all programs that intend to become CORSIA Eligible Emissions Unit Programs, regardless of whether they are governed by private sector organizations, non-governmental organizations, governments or under multilateral agreements. This would not only create a level-playing field among programs but also ensure that project owners satisfy the same requirements for avoiding double counting under different programs in order to sell offset credits to aeroplane operators for use under CORSIA.

While these Guidelines are written for the purpose of avoiding double counting with CORSIA, they could also be used to avoid double counting if offset credits are used for other purposes. The Guidelines are not intended to address double counting with regard to allowances issued under emissions trading systems (ETSs) or other programs that issue tradable units based on emissions quotas.

The Guidelines can also be informative for other users. Avoiding double counting of emissions reductions for CORSIA requires programs to take certain actions. As a practical matter, however, third parties – including project owners, validation and verification entities, and governments of the countries where the emission reductions or removals occur – may also need to perform certain actions. The Guidelines provide guidance and good practice examples of the actions that these third parties may need to take in order to satisfy double-counting-related requirements under CORSIA. The aeroplane operators using the credits, policy-makers, other stakeholders, and civil society may benefit from these Guidelines as well.

Finally, the Guidelines can also inform the ongoing negotiations on, and the subsequent implementation of, the Paris Rulebook. While these Guidelines focus on avoiding double counting in the context of the CORSIA, many aspects are also relevant if offset credits are used for other purposes, such as for achieving NDCs under the Paris Agreement. The Guidelines could therefore also assist programs and other users in ensuring that double counting is avoided for other possible uses of offset credits, including in the context of international transfers under Article 6 of the Paris Agreement. The Guidelines do not cover all possible contexts and uses, however, and programs may need to consider how they implement these Guidelines together with other domestic or international requirements for avoiding double counting.

## 1.3 CORSIA REQUIREMENTS FOR AVOIDING DOUBLE COUNTING

The CORSIA Emissions Unit Eligibility Criteria, as adopted by the ICAO Council in March 2019, require programs to put measures in place to avoid all three forms of double counting: double issuance, double use, and double claiming (see Box 1). The CORSIA Emissions Unit Eligibility Criteria include two types of criteria: “program design elements” and “carbon offset credit integrity assessment criteria.” Both include provisions for avoiding double counting of emission reductions.

### **BOX 1: CORSIA Emissions Unit Eligibility Criteria on avoiding double counting, as adopted by the ICAO Council in March 2019**

#### ***Program design element***

**Avoidance of Double Counting, Issuance and Claiming:** Programs should provide information on how they address double counting, issuance and claiming in the context of evolving national and international regimes for carbon markets and emissions trading.

#### ***Carbon offset credit integrity assessment criteria***

**Eligibility Criterion:** Programs should deliver credits that represent emissions 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 emissions 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 emissions 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 emissions reduction activity). In order to prevent double claiming, eligible programs should require and demonstrate that host countries of emissions 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 emissions reduction activity.

## **I.4 SCOPE OF THESE GUIDELINES**

These Guidelines help programs and others to identify how and under which conditions double counting can occur and offer guidance and good practice examples for avoiding different forms of double counting.

The Guidelines contain two types of guidance. In many places, the Guidelines state what programs “*should*” do to avoid double counting. These provisions are necessary to avoid double counting. In other places, the Guidelines identify what is “good practice.” These instances describe specific approaches that programs can use to avoid double counting in a robust manner, recognizing that there may be other means to achieve the same objective. In addition, the Guidelines provide “good practice examples,” which include practical examples of how the guidance could be implemented in the context of different circumstances. Throughout the document, the guidance is accompanied by explanations of the rationale for the proposed requirements and good practice approaches, which are highlighted in *italics*.

In terms of timing, the Guidelines focus on avoiding double counting in the period after 2020 in the context of the Paris Agreement. They do not address whether and how double counting should be avoided in the period up to 2020 (see Box 2).

Likewise, voluntary climate action is outside the scope of these Guidelines. However, aspects of these Guidelines could help to inform best practices in the future related to voluntary market transparency and integrity.

Furthermore, this version of the Guidelines does not address offset credits that are issued for emission reductions or removals that are not covered by NDC targets. The ADC Working Group considered several aspects in relation to this issue (see Box 3). This issue may be addressed in a future revision to these Guidelines.

These Guidelines also do not address potential double counting issues that could arise in relation to other international frameworks that contribute to mitigating climate change. For example, Parties to the International Maritime Organization are considering introducing a sectoral approach to address GHG emissions from international maritime transportation; however, the approach has not yet been operationalized.



These Guidelines assume that an emissions-based accounting system will be implemented under the Paris Agreement in order to account for internationally transferred mitigation outcomes and for the use of offset credits under CORSIA. This means that adjustments are applied in a 'structured summary' to the anthropogenic emissions by sources and removals by sinks covered by the NDC, as referred to in paragraph 77d in the Annex to decision 18/CMA.1. However, certain questions related to the application of adjustments remain undecided. These include whether adjustments will be required for emission reductions or removals that occur outside the coverage of NDCs, and whether separate accounting adjustments will be required in relation to NDC targets expressed in non-GHG metrics. With

regard to reductions and removals not covered by NDCs, this version of the Guidelines does not address how these should be accounted for. With respect to NDC targets in non-GHG metrics, the Guidelines indicate that programs should transparently report on potential overlaps with project activities, but do not address accounting questions. If future CMA decisions stipulate an accounting approach related to emission reductions not covered by NDCs or targets in non-GHG metrics, these Guidelines may need to be updated.

Lastly, these Guidelines do not address potential double counting issues that arise from the use of lower carbon aviation fuels or sustainable aviation fuels.

## BOX 2: Avoiding double counting through 2020

Through 2020, countries have agreed to or communicated international climate change mitigation targets in the context of the UNFCCC, the Kyoto Protocol and its Doha Amendment. In response to the fifteenth and sixteenth Conferences of the Parties (COP) to the UNFCCC, held respectively in Copenhagen and Cancun, countries put forward voluntary pledges and nationally-appropriate mitigation actions for the year 2020 (hereinafter referred to collectively as "Cancun targets"). The targets of developed countries that participate in the Kyoto Protocol's second commitment period were later translated into quantified emission limitation and reduction objectives for the period 2013 to 2020 and included in Annex B under the Doha Amendment, while the targets of other countries remain under the UNFCCC.

Whether and how double counting between these targets and CORSIA should be addressed is controversial – including within the working group that produced these Guidelines. Several aspects may be worth noting.

First, the legal status of the different targets differs. Targets under the Kyoto Protocol are legally binding, which does not hold for NDCs under the Paris Agreement and the Cancun Agreements. Moreover, the Doha Amendment has not yet entered into force.

Second, provisions for avoiding double counting under these frameworks differ. None of these frameworks foresaw

or have provisions in place to account for the use of offset credits by aeroplane operators under CORSIA. The Kyoto Protocol has a full and robust accounting system in place. However, it only avoids double counting of emission reductions within its boundaries and does not have provisions to avoid double counting with Cancun targets.

In the negotiations following the adoption of the Cancun targets, Parties agreed that "various approaches, including opportunities for using markets ... must meet standards that ... avoid double counting of effort" (decision 2/CP.17, paragraph 79). Decision 1/CP.21, adopting the Paris Agreement, also refers to avoiding double counting in the context of action prior to 2020, urging "host and purchasing Parties to report transparently on internationally transferred mitigation outcomes, including outcomes used to meet international pledges, and emissions units issued under the Kyoto Protocol with a view to promoting environmental integrity and avoiding double counting." In practice, however, specific provisions to avoid double counting with regard to Cancun targets have thus far not been put in place.

Therefore, the ADC Working Group decided to refrain from developing guidelines on this issue. This is not intended to convey a message that this issue is unimportant, but rather that there were differing views on whether and, if so, how it should be addressed.





### BOX 3: Emission reductions or removals not covered by NDCs

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The ADC Working Group discussed but could not resolve the issue whether adjustments are needed in the case of offset credits that are issued for emission reductions that are not covered by a GHG target communicated in NDC targets. Some members were of the view that double counting technically does not occur if the emission reductions or removals are not covered by the NDC, and that therefore an adjustment is not needed in relation to these emission reductions or removals in order to avoid double counting. Moreover, requiring adjustments in such instances could also make it more difficult for the country to achieve its NDC target; if its GHG target is ambitious and emission reductions or removals generated outside the coverage of its target are used under CORSIA, the country would have to “compensate” for that in order to still achieve its target, by further reducing emissions within sectors covered by the target. And third, requiring adjustments – or not allowing emission reductions or removals outside the coverage of NDCs to qualify for CORSIA – could imply a lower supply of offset credits, in particular if countries are not willing to commit to applying adjustments.

Other members supported the view that adjustments should be applied regardless, or that offset credits from emission reductions or removals not covered by NDCs should not be eligible for use under CORSIA. It was noted that – if no adjustment is required – crediting emission reductions or removals that are not covered by NDCs could create perverse incentives for countries not to broaden the scope of their NDCs. This could undermine the objective in Article 4.4 that all countries should move over time towards economy-wide targets. If countries have ambitious economy-wide targets, they may also have greater incentives to ensure that they only authorize projects that are additional and do not over-estimate emission reductions. A further practical difficulty of not requiring adjustments for emission reductions or removals that are not covered by NDCs is that the scope of current NDCs is

often not clear, so linking the adjustment requirement solely to NDC coverage may result in inconsistent treatment by different programs, even in the same country with the same activities. Furthermore, some members were of the view that in the light of the goals of the Paris Agreement, if an adjustment is not made for use of emission reductions that originate outside the scope of an NDC, allowing such reductions to be reported by Paris/UNFCCC Parties as part of their obligations to reduce emissions so as to avoid more than a 1.5 to 2 C temperature increase at the same time that airlines are using those reductions under CORSIA to offset increases in their emissions, would in effect double-count the reductions, and should therefore be avoided.

Specifically, ADC Working Group members Carbon Market Watch, Environmental Defense Fund, and World Wildlife Fund stress that while paragraph 77d in the Annex to Decision 18/CMA.1 on “Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement” and paragraph 17 of Decision 4/CMA.1 on “Further guidance in relation to the mitigation section of decision 1/CP.21” provide important foundational elements for avoiding double counting, application of these CMA Decisions: a) does not necessarily represent best practice, b) may not be sufficient to avoid all forms of double counting, and c) could be undermined by future CMA decisions. For example, if the CMA were, in the future, to decide that Parties need not make corresponding adjustments when authorizing the use, for purposes other than towards NDCs, of credits issued for emissions reductions and removals originating outside the scope of NDCs, such a decision, in the view of these Working Group members, would allow double counting of mitigation efforts with CORSIA, undermining CORSIA’s environmental integrity. In such a case, these Working Group members would object to the use of such double counted credits for CORSIA compliance even though the Guidelines could be interpreted to allow such use.

# GUIDELINES

## II.1 OVERVIEW

The CORSIA Eligible Emissions Unit Criteria require programs to put measures in place to avoid all three forms of double counting: double issuance, double use, and double claiming. This section provides an overview of how these Guidelines recommend that programs satisfy these requirements.

To avoid double counting, programs must adopt and implement a number of policies, standards, procedures, and operational capabilities that collectively prevent all three forms of double counting:

- *Double issuance* can be avoided through the effective operation of program registry and database systems (section II.3), and the adoption of standards and procedures for avoiding double issuance (section II.5).
- *Double use* can be avoided through the effective operation of program registry and database systems (section II.3).
- *Double claiming* can be avoided through the effective operation of program registry and database systems (section II.3); the adoption of policies on the use of global warming potentials (section II.4); the adoption of standards and procedures for avoiding double claiming with climate change mitigation under the Paris Agreement (section II.6); and the adoption of standards and procedures for avoiding double claiming with mandatory domestic climate change mitigation targets (section II.7).

Offset credits for which all program requirements for avoiding double counting have been met should be clearly identified as such. If a program intends to issue, or has already issued, offset credits for which not all double counting requirements set out in these Guidelines are initially satisfied (e.g. because meeting such requirements is not necessary for their use outside of CORSIA), then programs should adopt procedures for explicitly qualifying offset credits for use under CORSIA (section II.8).

Finally, to provide transparency and facilitate the application of adjustments by countries, programs should annually report information on the offset credits they

have issued, the status of those offset credits, including whether the offset credits are qualified for use under CORSIA, and the quantities of emission reductions or removals that countries have authorized for use by other countries or entities (section II.9).

Table 1 indicates how the different forms of double counting are addressed by different sections of these Guidelines.

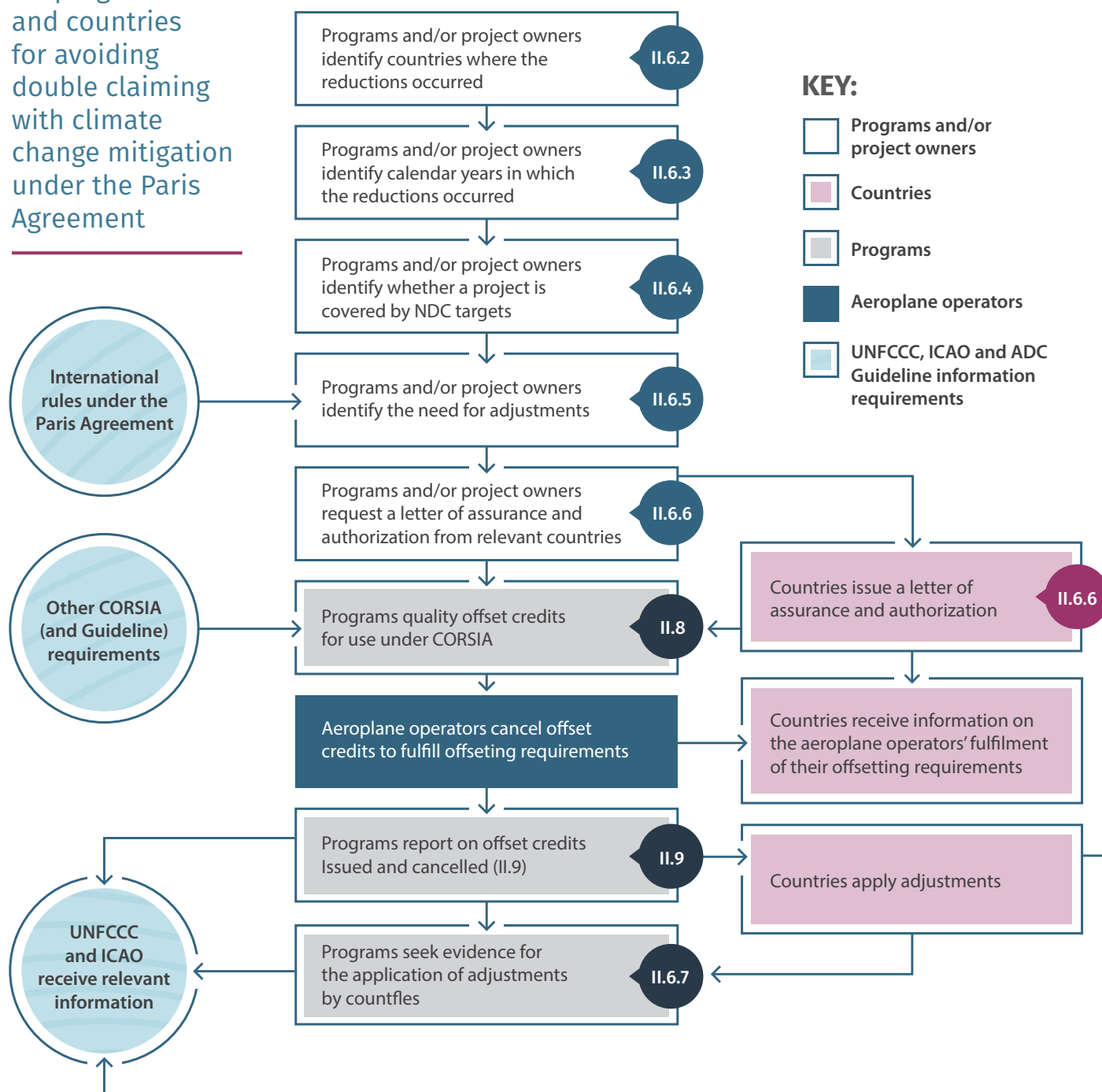
**TABLE 1.** Guideline sections addressing double use, double issuance, and double claiming

| Section  | Double issuance | Double use | Double claiming |
|--|-----------------|------------|-----------------|
| Functional capabilities of program registry and project database systems (section II.3)  | ○               | ○          | ○               |
| Policies on the use of global warming potentials (section II.4)  | ○               |            | ○               |
| Standards and procedures for avoiding double issuance (section II.5)   | ○               |            |                 |
| Standards and procedures for avoiding double claiming with climate change mitigation under the Paris Agreement (section II.6)  |                 |            | ○               |
| Standards and procedures for avoiding double claiming with mandatory domestic climate change mitigation targets (section II.7) |                 |            | ○               |
| Procedures for the qualification of offset credits for use under CORSIA (section II.8)   | ○               | ○          | ○               |
| Program reporting (section II.9)   | ○               | ○          | ○               |

The majority of these Guidelines is devoted to standards and procedures for avoiding double claiming with climate change mitigation under the Paris Agreement (section II.6). To avoid such double claiming, countries need to account for offset

credits used by aeroplane operators. Using the terminology of the Paris Agreement, these Guidelines refer to “adjustments” as the effective bookkeeping entries that countries use to account for the use of an offset credit under CORSIA.

**FIGURE 1:** Steps for programs and countries for avoiding double claiming with climate change mitigation under the Paris Agreement



To avoid double claiming, programs should adopt a series of standards and procedures that will facilitate the transparent application of adjustments by countries (section II.6). Specifically, programs should:

- ▶ Provide information needed by countries to understand whether a project's activities and emission reductions/removals are covered by NDC targets and to facilitate the application of adjustments, and assign attributes to each offset credit accordingly through a registry information system (sections II.6.2 through II.6.4);
- ▶ Identify whether a country needs to apply an adjustment to account for the use of the offset credits under CORSIA, and assign an attribute to each offset credit accordingly (section II.6.5).<sup>6</sup>

As it will take some time until countries apply and report on adjustments – because the relevant accounting systems still have to be developed and implemented, and because the first biennial transparency reports under Article 13 may only be submitted in 2024 – the Guidelines envision that countries can, as long as this does not infringe on future decisions under the Paris Agreement, publicly declare in a “letter of assurance and authorization” that they will apply adjustments later (section II.6.6). These letters should, inter alia, authorize the use of the project's emission reductions or removals, issued as offset credits, by aeroplane operators in order to meet offsetting requirements under CORSIA; declare that the country will not use the project's emission reductions or removals to track progress towards, or for demonstrating achievement of, its NDC; and declare that the country will account for their use by aeroplane operators by applying relevant adjustments in the structured summaries of their biennial transparency reports, consistent with relevant provisions under the Paris Agreement and decisions thereunder. In addition, programs should also establish procedures to follow up on whether countries have applied adjustments and reported on the use of offset credits under CORSIA (section II.6.7).

## II.2 INCORPORATION OF THESE GUIDELINES IN PROGRAM DOCUMENTS AND OPERATIONS

A program should incorporate the provisions set forth in these Guidelines into its relevant program documents and operations. Programs may do so by revising and amending existing program documents and/or by adopting new program documents that specifically address issues related

<sup>6</sup> As indicated in Figure 1, programs may choose to delegate to project owners the task of generating and/or providing needed information.

to avoiding double counting in relation to the CORSIA. Programs may use their discretion to decide how, and in which program documents, the Guidelines are incorporated. The relevant program documents typically include standards, procedures, guidelines and forms. The checklist in Annex III.2 can assist programs in ensuring that they have adopted and incorporated all necessary requirements.

*Rationale and context: Under the CORSIA, programs need to demonstrate that they satisfy the CORSIA Emissions Unit Eligibility Criteria in order to become eligible to issue offset credits that aeroplane operators can use to fulfil their offset requirements under CORSIA. Programs can demonstrate this by incorporating the provisions set forth in these Guidelines into their program documents and operations.*

When incorporating these Guidelines into program documents and operations, programs should also address:

- ▶ Where applicable, any requirements arising from relevant decisions by the ICAO Council; and
- ▶ Where applicable, any requirements arising from decisions under the UNFCCC, including its Kyoto Protocol and its Paris Agreement.

Programs should also update their program documents, as necessary, to reflect decisions by the ICAO Council or the UNFCCC that amend or revise earlier decisions and that are relevant for avoiding double counting for the CORSIA.

*Rationale and context: The ICAO Council or Parties to the UNFCCC could take future decisions that are relevant for how double counting should be avoided. In particular, Parties are still to decide on how the avoidance of double counting will be implemented under Article 6.*

Programs should ensure that all program requirements are applied consistently and transparently across countries and projects.

A program should incorporate all provisions in these Guidelines, as well as any relevant requirements arising from relevant decisions by the ICAO Council or Parties to the UNFCCC, in relevant program documents, *before* it qualifies offset credits for use under CORSIA and allows cancellation of qualified offset credits to meet offsetting requirements under CORSIA.

The timing of steps needed to qualify offset credits for use under CORSIA may vary depending on circumstances. At a program's discretion, offset credits may be qualified for use under CORSIA at the time of issuance or after issuance (but before cancellation). The possible timing of the different steps is further specified in relevant sections in these Guidelines.

*Rationale and context: The requirements for avoiding double counting may be satisfied at different times. For many of the requirements, it would be most practical to satisfy them when offset credits are issued. Programs may, however, also issue offset credits before these requirements are satisfied, and then qualify offset credits for use under CORSIA at a later time (prior to their use). This could provide advantages for project owners, and would also accommodate offset credits that were issued by a program prior to its approval by CORSIA.*

## II.3 FUNCTIONAL CAPABILITIES OF PROGRAM REGISTRY AND PROJECT DATABASE SYSTEMS

Programs should administer registry and project database systems that support offset credit issuance, transfer, and cancellation functions, and make available information needed to avoid double issuance, double use, and double claiming.

### II.3.1 Offset credit registry capabilities

Programs should administer a robust offset credit registry<sup>7</sup>, with sufficient functionality and transparency to fulfill all substantive and procedural requirements needed to avoid double counting for CORSIA. In particular, a program's offset credit registry system should:

- ▶ Be capable of securely and transparently effectuating the issuance, transfer, and cancellation of offset credits;
- ▶ Allow the tagging of each offset credit with a unique identifier (e.g., serial number) so that each offset credit is clearly associated with a specific issuance and vintage related to quantified and verified emission reductions or removals, and so that information relevant for avoiding double counting can be assigned to each offset credit;
- ▶ Make relevant information on offset credits available to users and the public; and
- ▶ Incorporate offset credit cancellation procedures that ensure that cancellation is clearly indicated, irreversible, and unambiguously designated for an intended purpose.

*Rationale and context: A prerequisite for avoiding double use is that offset credits are clearly assigned to specific accounts, and that – when cancelled – the cancellation itself and the purpose for which they are cancelled is clearly specified. To allow checking against double issuance, offset credits should be clearly and unambiguously linked to specific emission reductions or removals achieved by a project. Serialization of offset credits within a registry system (or equivalent record-tracking system) provides the most robust way for doing so.*

### II.3.1.1 Relevant information for the avoidance of double counting

The first edition of the SARPs identifies certain types of information that CORSIA Eligible Emissions Unit Programs must make publicly available in relation to units that are cancelled for a given compliance period. Specifically, Paragraph 4.2.2 of the SARPs states that aeroplane operators must require each CORSIA Eligible Emissions Unit Program registry to make visible, on the registry's public website, information in Field 5 of Table A5-7 (except fields 5.j, 5.k and 5.m). These information items are reproduced here in Table 2 for convenience .

**TABLE 2.** Field 5 of Table A5-7 from the first edition of the SARPs<sup>1</sup>

|                |  |  |
|----------------|--|--|
| <b>Field 5</b> | Consolidated identifying information for cancelled emissions units | For each batch of cancelled emissions units (batch defined as a contiguous quantity of serialized emissions units), identify the following: <ul style="list-style-type: none"><li><b>5.a</b> Quantity of emissions units cancelled;</li><li><b>5.b</b> Start of serial numbers;</li><li><b>5.c</b> End of serial numbers;</li><li><b>5.d</b> Date of cancellation;</li><li><b>5.e</b> Eligible emissions unit program;</li><li><b>5.f</b> Unit type;</li><li><b>5.g</b> Host country;</li><li><b>5.h</b> Methodology;</li><li><b>5.i</b> Demonstration of unit date eligibility; and</li><li><b>5.j</b> Aeroplane operator in whose name the unit was cancelled.</li></ul> |
|----------------|--|--|

<sup>7</sup> Note: It is common for some programs to use the term “registry” to refer to both an offset credit database and project database, which are frequently interlinked with each other (see, for example, [PMR \(2015\)](#)). These functions are distinguished here to emphasize that they are distinct requirements, despite the common practice of providing them in an integrated or interlinked system.



In addition to the information identified in Table 2, programs applying these Guidelines should also make publicly available – for *each* issued offset credit (or each batch of issued offset credits, as appropriate) – the following information in order to facilitate the avoidance of double counting:

- ▶ The project to which the offset credit was issued, including unique identifying information about the project, in accordance with the guidance set forth in section II.3.2, below;
- ▶ *Rationale and context: Making available information about the specific project for which offset credits are issued is necessary in order to avoid double issuance. Offset credits serial numbers, for example, can be cross-referenced with information contained in a project database, as indicated in Section II.3.2.*
- ▶ The country where the offset credit's associated emission reductions or removals occurred, as determined in accordance with the guidance set forth in section II.6.1, below;
- ▶ *Rationale and context: The country in which an offset credit's associated emission reductions or removals occurred is necessary information for effectively avoiding double claiming. Note that the country where the emission reductions or removals occurred is not always the same country where the mitigation action was implemented, which is often referred to as a "host country."*
- ▶ The calendar year in which the offset credit's associated emission reductions or removals occurred, as determined in accordance with the guidance set forth in section II.6.3, below;
- ▶ *Rationale and context: It is common for offset credits to have a unique identifier or serial number indicating the year in which they were issued. However, to avoid double claiming, it is important to also track for each offset credit when the offset credit's associated emission reductions or removals occurred.*
- ▶ An indication of whether the offset credit's associated emission reductions are covered by any GHG target(s) communicated in a country's NDC, as determined in accordance with the guidance set forth in section II.6.4, below;
- ▶ *Rationale and context: For a country to understand whether and how a project contributes to or hinders achieving its NDC target, and to effectively implement, report and reconcile the application of adjustments, the country may need information related to whether and how a project and its associated emissions reductions or removals were covered by GHG targets communicated in its NDC.*
- ▶ An indication whether or not an adjustment is needed for the offset credit in order to avoid double counting, as determined in accordance with the guidance set forth in section II.6.5, below;
- ▶ *Rationale and context: Countries may need to apply adjustments to account for the use of offset credits under CORSIA. Programs should follow the guidance set forth in section II.6.5 to make a determination about whether any adjustments are required for the use of specific offset credits, and flag the offset credits accordingly in their registry systems.*
- ▶ In the case that an adjustment is needed, an indication whether the country has applied the necessary adjustment related to the use of the offset credit, in accordance with the guidance set forth in section II.6.7, below;
- ▶ *Rationale and context: To effectively check and reconcile the application of adjustments, it is necessary to understand for which offset credits the country has already applied the necessary adjustments.*
- ▶ An indication whether the country has issued a letter of assurance and authorization for the offset credit's associated project, in accordance with the guidance set forth in section II.6.6, below;
- ▶ *Rationale and context: Under these Guidelines, a letter of assurance and authorization is needed for programs to qualify a project's offset credits for use under CORSIA. See sections II.6.6 and II.8.*
- ▶ Where applicable, an indication of whether the offset credit has been qualified by the program for use under CORSIA, in accordance with the guidance set forth in section II.8 below, including a reference to relevant documentation and the date of the qualification for use under CORSIA;
- ▶ *Rationale and context: Aeroplane operators may only use CORSIA eligible offset credits to fulfil their offsetting requirements under CORSIA. If a program intends to issue, or has already issued, offset credits for which not all double counting requirements set out in these Guidelines are initially satisfied (e.g. because meeting such requirements is not necessary for their use outside of CORSIA), it is important that programs clearly indicate for each offset credit whether all program requirements for avoiding double counting have been satisfied and whether the program has qualified the offset credit for use under CORSIA.*
- ▶ An indication of whether the offset credit has been cancelled and, if so, the purpose and date of the cancellation, in accordance with the guidance set forth in section II.3.1.3, below.
- ▶ *Rationale and context: Transparent information on cancellations is key to avoid double use of offset credits.*



### II.3.1.2 Means of disclosing relevant information

Programs may ensure in two ways that the necessary information related to each offset credit is identifiable (hereinafter referred to as “assigning attributes” to offset credits):

- ▶ Information may be flagged or encoded in the unique identifier or serial number associated with each offset credit within a program’s registry system; and/or
- ▶ Information may be contained in publicly accessible databases (e.g., the project database and other information systems) which are cross-referenced with each offset credit’s unique identifier or serial number in the offset credit registry system.

Some public disclosure requirements, such as an attribute indicating the calendar year in which the emission reductions or removals occurred, could be fulfilled with either of the options above. Other public disclosure requirements, such as whether the offset credit has been cancelled, could only be fulfilled through the second option.

### II.3.1.3 Cancellation functionality

Finally, in order to avoid double use of offset credits, a program registry should include functionality for cancelling offset credits that clearly indicates their cancelled status, transparently documents the purpose of cancellation, and permanently removes the canceled offset credits from circulation within the registry. Programs should ensure this by:

- ▶ Requiring offset credit holders to clearly indicate the purpose for which offset credits are cancelled; and
- ▶ Adopting systems to transparently document the purpose, either within the registry system or in another publicly accessible information system, so that cancelled offset credits can only be used for a single purpose, such as:
  - ▷ Meeting an entity’s offsetting requirement under CORSIA or other mandatory emission reduction obligations;
  - ▷ Achieving voluntary offsetting goals;
  - ▷ Compensating for excess issuance;
  - ▷ Addressing non-permanence; or
  - ▷ Removal from the registry for the purpose of re-issuance by another program or entity.

For cancellations to meet offset requirements under the CORSIA, the cancellation information should specify the aeroplane operator for which the offset credits were cancelled and the calendar year for which an offsetting requirement

is fulfilled through the cancellation (e.g. “XYZ Airlines, 2024 offsetting requirement (covering the 2021-2023 offsetting compliance period) under CORSIA”).

*Rationale and context: Avoiding double use requires that any registry cancellation function clearly and unambiguously identifies the purpose for which offset credits are cancelled, so that no more than one claim can be made for the use of the offset credit. In the context of CORSIA, this means that cancelled offset credits should be clearly linked to a specific offsetting requirement of a particular aeroplane operator.*

### II.3.2 Project database capabilities

Programs should administer a publicly accessible, transparent, and easily searchable project database that provides relevant information needed to avoid double counting under CORSIA. The project database may operate as a separately functioning system, or be incorporated as part of the program’s offset credit registry system. The project database should provide a unique identifier for each project that can be cross-referenced with offset credits issued in a program’s offset credit registry, so that project information can be identified for every offset credit issued within the registry.

At a minimum, the project database should contain the following information and documentation for each project to which the program issues offset credits:

- ▶ A description of the project, including information on the mitigation technologies;
- ▶ The emission sources, sinks, and greenhouse gases included in the calculation of the project’s emission reductions or removals, along with the location(s) of all relevant sources and sinks;
- ▶ The country and geographical location where the project is implemented;
- ▶ Any other information needed for the project to be unambiguously identified, and distinguished from other projects that may occur in the same location;
- ▶ An indication whether the project’s mitigation activities, emission reductions, and/or removals are covered by any targets – including targets expressed in non-GHG metrics – communicated in a country’s NDC, as determined in accordance with the guidance set forth in section II.6.4, below;
- ▶ The letter of assurance and authorization from the country or countries where a project’s emission reductions or removals occurred, once obtained;
- ▶ The project owners.

Programs should require this information from project owners prior to project registration (except for the letter of assurance and authorization which may also be provided at a later stage), and should make this information publicly available, e.g., via the program's website.

**Rationale and context:** Relevant information on the project is necessary to effectively avoid double issuance. Other programs or project owners need to have the necessary information to check whether the same project has already been registered or whether the same emission reductions or removals are claimed by another project. This information is typically included in the documentation required for project "registration" (i.e., formal acceptance and approval by the program) and made available in a publicly accessible project database.

## II.4 POLICIES ON THE USE OF GLOBAL WARMING POTENTIALS

For the purpose of issuing and qualifying offset credits for use under CORSIA, programs should use the following global warming potential (GWP) values to convert emission reductions/removals of greenhouse gases other than CO<sub>2</sub> into CO<sub>2</sub> equivalents:

1. The 100-year time-horizon values from the 4<sup>th</sup> assessment report of the Intergovernmental Panel on Climate Change (IPCC) for emission reductions or removals that occur *before* 1 January 2021;
2. The 100-year time-horizon values from the 5<sup>th</sup> assessment report of the IPCC for emission reductions or removals that occur on or *after* 1 January 2021 or, if applicable, any other common GWP values adopted for future periods in relevant decisions by the CMA.

Programs should clearly specify which GWP values are applicable for which period of time (e.g. for 2013-2020, 2021-2030, 2031-2039). The applicable GWP values should be applied consistently to all emission reductions occurring in the relevant period and consistently to all countries and projects.

**Rationale and context:** ICAO has not established a requirement regarding which GWP values programs should use to convert non-CO<sub>2</sub> emission reductions/removals into CO<sub>2</sub> equivalents. The CORSIA State Letter refers to GWPs only in the context of life cycle assessments for sustainable fuels. In this context, the 100-year values from the 5th IPCC assessment

*report should be used. If different programs use different sets of GWP values under CORSIA, this could have at least two adverse impacts. First, this could create a risk that project owners pick the program which results in higher CO<sub>2</sub> equivalents of emission reductions, depending on which gases are abated. In aggregate, this could lead to higher emission reduction claims compared to a situation where all programs use the same GWP values. Second, as the same emission reduction would have a different value under different programs, this could distort the market. These Guidelines therefore recommend that all CORSIA eligible programs use the same GWP values, taking into account relevant decisions under the UNFCCC.*

*Under the Paris Agreement, it is envisaged that countries account for emissions and removals in accordance with "common metrics" assessed by the IPCC (decision 1/CP.21, paragraph 31, sub-paragraph a). At COP24 in Katowice, Parties agreed that each Party shall use in their national inventory reports the 100-year time-horizon GWP values from the 5th IPCC assessment report, or 100-year time-horizon GWP values from a subsequent IPCC assessment report as agreed upon by the CMA, to report aggregate emissions and removals of GHGs, expressed in CO<sub>2</sub>eq. Each Party may in addition also use other metrics (e.g. global temperature potential) to report supplemental information on aggregate emissions and removals of GHGs, expressed in CO<sub>2</sub>eq (see paragraph 37 of the decision 18/CMA.1 on "Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement"). Furthermore, Parties adopted guidance on accounting for Parties' nationally determined contributions, which establishes that Parties account for anthropogenic emissions and removals in accordance with these metrics (paragraph 1, sub-paragraph a, of Annex II to decision 4/CMA.1 on "Further guidance in relation to the mitigation section of decision 1/CP.21"). This accounting guidance is, however, only mandatory for second and subsequent NDCs (paragraph 32 of decision 1/CP.21 and paragraph 14 of decision 4/CMA.1). In their first NDCs, countries communicated that they intend to use various GWP values, including values from the 2nd, 4th, and 5th IPCC assessment reports. It is thus possible that some countries use, for the first NDC, values other than those from the 5th IPCC assessment report to account for their NDC.*

*Parties also agreed to use a "structured summary" to report on adjustments that are applied to account for internationally transferred mitigation outcomes and mitigation outcomes used for "international mitigation purposes other than achievement of its NDC," such as CORSIA (paragraph 77d of the Annex to decision 18/CMA.1 and paragraph 17 of decision 4/CMA.1). To ensure robust accounting, a country should use in this structured*

summary a single set of consistent GWP values for both the quantification of emissions and removals covered by its NDC, and the quantification, and application of adjustments.

A key challenge arises if countries use metrics other than the 100-year time-horizon GWP values from the 5th IPCC assessment report to account for the first NDC. In this case, the offset credit issued by the program would be based on a different metric than the metric that should be used to quantify the number of adjustments that the country should apply to account for the use of that offset credit. For example, if a project reduces one tonne of CH<sub>4</sub>, a program may issue 28 offset credits using the 100-year GWP value from the 5th IPCC assessment report. If the country uses, however, the 100-year GWP of 21 from the 2nd IPCC assessment report to account for its NDC, it should apply an adjustment of 21 for the 28 offset credits issued by the program. This implies that the number of offset credits issued and used under CORSIA does not necessarily correspond to the amount of adjustments the country should apply. To address this challenge and facilitate robust reporting and accounting by countries, these Guidelines require that programs inform countries about the amount of adjustments that are necessary to effectively avoid double claiming based on the GWP values applied by the countries (see section II.9 below). This can enable the country to apply adjustments using the same metrics as it uses in its structured summary report for its GHG emissions and to account for its NDC.

## II.5 STANDARDS AND PROCEDURES FOR AVOIDING DOUBLE ISSUANCE

Programs should establish standards and procedures necessary to prevent double issuance of offset credits.

### 2.5.1 Protocols for offset credit issuance

Programs should establish standards and procedures for issuing offset credits that ensure that offset credits are issued only after final program approval of verification reports and any other supporting documentation related to a project's asserted emission reductions or removals.

*Rationale and context: Clear protocols for issuance are needed to ensure that offset credits are not issued in error (e.g., prior to formal program approvals) or more than once for each emission reduction or removal achieved.*

### II.5.2 Quantification standards and project eligibility criteria that prevent double issuance

Programs should establish quantification standards and project eligibility criteria that ensure that overlapping emission reduction or removal claims are avoided, so that different projects cannot be issued credits for the same emission reductions or removals.

*Rationale and context: Overlapping claims can, for example, occur when different entities involved in the production and/or consumption of the same good or service are allowed to claim offset credits for the same emission reductions or removals. For example, this could happen if the owner of a forest management project is issued credits for carbon stored in wood products, while at the same time (e.g., under the same or a different program) a producer of wood products is issued credits for the same stored carbon. The easiest way to avoid double issuance associated with overlapping emission reduction or removal claims is to define the boundaries for different project types such that overlap does not occur (e.g., in the methodology used for forest management projects, excluding any accounting for carbon stored in wood products). In some cases, this may mean allowing eligibility for certain kinds of project activities and disallowing others (e.g., allowing only forest land owners to register a project, not the wood product producers). Adopting appropriate eligibility criteria and quantification standards is usually straightforward within a single program. However, it may also require auditing of protocols and methodologies in other programs to ensure that overlap does not occur across eligible project types in other programs.*

To mitigate the risk that emission reductions from sources upstream or downstream of the project are also claimed by another project, it is good practice that programs apply the following principles in quantification standards when calculating emission reductions:

- If a project's quantification standard includes emission *reductions* at a source that is not located at the project site but upstream or downstream of the project, and a second project reduces emissions directly at this same source, then the emission reduction calculation for the first project should use an emission factor for the source that *takes into account* the implementation of the second project. This ensures that the first project cannot claim the emission reductions caused and claimed by the second project (see **Good Practice Example 1**). Likewise, the second project should not count any incremental reductions associated with the effects of the first project.

- If a project's quantification standard includes emission *increases* at a source that is not located at the project site but upstream or downstream of the project, and another project reduces emissions directly at this same source, then the emission reduction calculation for the first project should use an emission factor for this source that *ignores* the effects of the second project (i.e. that reflects the emissions level that would occur in the absence of the second project). This ensures that the first project cannot (in effect) claim the emission reductions caused and claimed by the second project (see **Good Practice Example 2**).

### II.5.3 Standards and procedures that avoid double issuance due to double registration

Programs should establish standards and procedures that ensure that the same project is not simultaneously registered more than once within a single program.

In some instances, the same project may be registered



#### Good practice example 1: Addressing overlap between a project reducing fertilizer application and a project to abate N<sub>2</sub>O emissions from nitric acid production

A project reduces the application of nitrogen fertilizer, thereby avoiding emissions from the production and application of the fertilizer. The project claims indirect baseline emissions from avoiding N<sub>2</sub>O emissions from the production of nitric acid, which is a chemical used to produce nitrogen fertilizer. At the nitric acid plant, another project is implemented which abates the N<sub>2</sub>O emissions from nitric acid production. Double issuance would occur if the fertilizer project used the *unabated* N<sub>2</sub>O emission factor at the nitric acid plant to calculate baseline emissions from nitric acid production. In this case, both projects would claim the same emission reductions. Double issuance is avoided if the fertilizer project uses the *actual* N<sub>2</sub>O emission factor observed at the plant to calculate baseline emissions.




#### Good practice example 2: Addressing overlap between a biofuel project and a project to abate N<sub>2</sub>O emissions from nitric acid production

A project produces biofuels and uses them in a captive vehicle fleet, thereby avoiding the combustion of fossil fuels. The project uses nitrogen fertilizer in growing its feedstock crops. The project accounts for the emissions associated with the biofuel production as project emissions. This includes N<sub>2</sub>O emissions from the production of nitric acid, which is a chemical used to produce nitrogen fertilizer. At the nitric acid plant, another project is implemented which abates the N<sub>2</sub>O emissions from nitric acid production. Due to the biofuels project, more fertilizer is consumed, and hence more nitric acid is produced. The project abating N<sub>2</sub>O from nitric acid production can claim more credits due to the increased biofuel production. Double issuance would occur if the biofuels project used the *actual* N<sub>2</sub>O emission factor observed at the nitric acid plant to calculate upstream project emissions from nitric acid production. In this case, both projects would indirectly claim the same emission reductions. Double issuance is avoided if the biofuel project uses the *unabated* N<sub>2</sub>O emission factor to calculate project emissions.<sup>8</sup>

<sup>8</sup> As noted on pages 5 and 21, potential double counting issues that arise from the use of lower carbon aviation fuels or sustainable aviation fuels are not addressed in these Guidelines.





simultaneously under two different programs. Therefore, programs should also establish standards and procedures that ensure, if a project is registered with more than one program, that offset credits are cancelled by one program before offset credits are issued by another program for the same emission reductions or removals. To ensure that these cancellations cannot be claimed for any other purposes, a program's standards and procedures should also require that the cancellations are clearly designated for the purpose of allowing the reissuance of offset credits for the same emission reductions or removals under another program.

It is good practice for programs to ensure this by:

- ▶ Requiring legal attestations from project owners stipulating that they have not and will not request issuance of offset credits for emission reductions or removals from more than one program, unless such offset credits are canceled under one program prior to reissuance under another program, and the cancellation is clearly designated for the purpose of allowing the reissuance of offset credits for the same emission reductions or removals under another program.
- ▶ Rationale and context: Requiring a legal attestation from project owners makes requirements against double issuance enforceable. It signals to project owners that they must not request registration under another program or must not request double issuance of offset credits, and provides a basis for taking legal or regulatory action against project owners that knowingly do so, within the same program or with multiple programs.
- ▶ Conducting checks to verify that registered projects have not, and will not, be issued offset credits in any other programs for emission reductions or removals for which the program is also issuing offset credits (unless offset credits have been canceled under other programs prior to reissuance under the current program).
- ▶ Rationale and context: Programs can coordinate with other programs to ensure that projects are not able to be issued offset credits for the same reductions under more than one program. Such checks can consist of a review of the project databases of other programs, and/or coordinated communication with other programs' staff at the time a project is submitted for registration or when project owners request an issuance. Checks may be undertaken by program staff or by verification bodies as part of required verification duties.

## II.6 STANDARDS AND PROCEDURES FOR AVOIDING DOUBLE CLAIMING WITH CLIMATE CHANGE MITIGATION UNDER THE PARIS AGREEMENT

Programs should establish standards and procedures that clearly specify all requirements that must be fulfilled in order to avoid double claiming with respect to the climate change mitigation under the Paris Agreement. These should include:

1. The adoption of general program policies for avoiding double counting (section II.6.1);
2. The identification of the countries where the emission reductions or removals occurred (section II.6.2);
3. The identification of the calendar years in which the emission reductions or removals occurred (section II.6.3);
4. Identification of whether a project and its emission reductions or removals are covered by NDC targets (section II.6.4);
5. The identification of the need for adjustments (section II.6.5);
6. Obtaining a letter of assurance and authorization from the country or countries where the emission reductions or removals occurred (section II.6.6); and
7. Obtaining evidence of the application of adjustments by countries (section II.6.7).

Note that as a practical matter, programs may wish to delegate to project owners certain tasks associated with steps 2 through 6. For example, project owners may be best situated to identify where and when a project's emission reductions or removals occurred, and whether those emission reductions/removals are covered by NDC targets – information which program staff could then confirm and approve. Although programs should have ultimate responsibility for performing all steps identified above and approving any information provided, the Guidelines indicate where certain steps may in practice be undertaken by project owners, at a program's discretion. In these cases, the Guidelines indicate that steps should be undertaken by "project owners and/or program staff." At their discretion, programs may also choose to rely on validation and verification entities to confirm information provided by project owners.

## II.6.1 General program policies for avoiding double claiming

Double claiming between the country where an offset credit's associated emission reductions or removals occur and an aeroplane operator under CORSIA could occur under a variety of circumstances. In some instances, ensuring that double claiming is avoided could be straight-forward. In other instances, avoiding double claiming could prove to be difficult, for example, if some of the emission reductions occur in another country than where the project is implemented. These Guidelines provide flexibility to programs on how they address these circumstances. Three different approaches are possible. Programs can ensure that:

1. Double claiming is avoided by ensuring, through implementation of these Guidelines, that the offset credits' associated emission reductions or removals are not claimed by the country where they occurred; or
2. No offset credits are issued for the emission reductions or removals; or
3. The offset credits issued for the emission reductions or removals are not qualified for use under CORSIA.

Programs may use their discretion to decide which of these approaches is implemented but should adopt policies that clearly specify (in program documents) the conditions under which each approach will be followed. Note that different approaches may be applied to different offset credits issued to a project.

Where programs implement the first approach, they should only qualify offset credits for use under CORSIA if the emission reductions or removals have occurred prior to the issuance of the offset credits (i.e., ex-post issuance).

*Rationale and context: All three approaches can effectively avoid double claiming. Programs may consider, however, which approaches are best suited under which circumstances and which may better serve broader purposes beyond CORSIA. The first approach enables the qualification of the offset credits for use under CORSIA but could be more difficult to implement for some of a project's emission reductions or removals. For example, for projects that reduce emissions in multiple countries, it may require more than one country to apply adjustments, which may be more difficult to achieve. The second approach may be suitable if a program requirement cannot be satisfied for a small fraction of the emission reductions or removals. The third approach may be less suitable if programs want to ensure that their offset credits can be used for different international compliance purposes and if they intend to offer one international offset credit type that is*

*fully fungible for different compliance purposes. Programs could, however, also issue offset credits with different features with regard to double counting requirements. A "standard" offset credit may not address double counting risks and could, for example, be used for domestic schemes (e.g. to meet tax obligations or requirements in ETSs). A "double-claiming-risk-free" offset credit may provide assurance that the user of the offset credit can claim the emission reductions or removals and that these are not also used by the countries where the emission reductions or removals occurred.*

## II.6.2 Identification of the countries where the emission reductions or removals occurred

Programs should establish standards and procedures to identify in which country each offset credit's associated emission reductions or removals occurred and to assign to *each* issued offset credit an attribute indicating the relevant country. The standards and procedures should accommodate situations where a project is implemented, or affects emissions, in more than one country.

To determine in which country the emission reductions or removals occurred, the program's standards and procedures should require project owners and/or program staff to:

1. Identify the countries in which the project is implemented, i.e. where the mitigation action is undertaken;
2. Identify the countries, or group of countries, where the project's calculated emission reductions or removals occur;
3. Determine the proportion of emission reductions or removals that occurred within each identified country, ensuring that
  - ▷ The allocation to countries is proportional to where the emission reductions or removals occurred;
  - ▷ A project cannot claim emission reductions in one country while ignoring increases of emissions in another country due to the project;
  - ▷ The total number of offset credits issued does not exceed the net emission reductions or removals of the project in *all* countries; and
4. Assign an attribute to *each* offset credit indicating the country where the emission reductions or removals occurred, ensuring that only one country is assigned to each offset credit.





### Good practice example 3: Efficient lighting GHG reduction program implemented in several countries

A program distributes efficient light bulbs to households with a grid connection in two countries. The two countries have two separate electricity systems. The program should monitor through respective surveys how much electricity is saved in each of the two countries due to the program. The emission reductions are calculated for each country separately by multiplying the savings in electricity consumption by the grid emission factor used for that country.

The program's standards and procedures should require project owners and/or program staff to transparently document the allocation of offset credits to countries. It is good practice that the allocation of offset credits to countries is verified by a validation and verification entity (e.g., by including the relevant information in monitoring reports submitted for verification).

The program's standards and procedures should also clarify *when* countries should be identified and associated attributes assigned to offset credits. Once a program becomes an eligible program under CORSIA, it is good practice to identify the countries before the issuance of offset credits, and to assign attributes at the time of issuance. For offset credits that were already issued before the program became an eligible program under the CORSIA, these steps may be conducted after issuance.

*Rationale and context: To effectively avoid double claiming, it is important to identify in which countries the offset credits' emission reductions or removals occurred. In most instances, a project is implemented only in one country and the emission reductions or removals occur in the same country. In some instances, however, the emission reductions or removals could occur in several countries or in a different country than where the project is being implemented. Examples include programmatic approaches that often implement activities in several countries; multinational electricity systems in which the generation or saving of electricity in one country can affect the emissions from power plants in other countries; and projects avoiding upstream or downstream emissions that occur in other countries, such as from the production of fossil fuels. Depending on the project and quantification standard used, it may or may not be possible to discretely identify the countries in which these emission reductions or removals occurred. In some instances, only groups of countries may be identified.*

### II.6.3 Identification of the calendar years in which the emission reductions or removals occurred

Programs should establish standards and procedures to identify for *each* offset credit the calendar year in which the associated emission reductions or removals occurred, and to assign to *each* issued offset credit an attribute indicating the calendar year.

Offset credits should be allocated proportionally to calendar years based on when a project caused emission reductions or removals to occur, ensuring that only one calendar year is assigned to each offset credit.

Programs may implement two approaches to allocate offset credits to calendar years:

- **Direct measurement:** The emission reductions are measured continuously, or relevant meters are read at the end of a calendar year (e.g. on 31 December or 1 January).
- **Allocation based on plausible assumptions:** The emission reductions are allocated to the calendar years using plausible assumptions on when they likely occurred.

It is good practice that direct measurement is conducted where this is practically feasible and can be implemented without undue costs. This holds, for example, for projects that generate renewable electricity and measure their electricity generation.

The program's standards and procedures should require project owners and/or program staff to transparently document the allocation of offset credits to calendar years. It is good practice that the allocation of offset credits to calendar



#### Good practice example 4: Allocating offset credits to the calendar years in which emission reductions or removals occurred

In an efficient lighting project, the continued use of the lamps is monitored every three years. The overall emission reductions could be allocated to the relevant calendar years either proportionally to the time period or based on a plausible assumption for how the lamp failure rate likely developed over time.

In an afforestation project, the tree growth is monitored once every five years. Tables on the typical growth increment for the species and site-specific conditions can be used to approximately allocate the overall removals in the five-year period to single calendar years.

years is verified by a validation and verification entity (e.g., by including the relevant information in monitoring reports submitted for verification).

The program's standards and procedures should also clarify *when* the calendar years should be identified and associated attributes assigned to offset credits. Once a program becomes an eligible program under CORSIA, it is good practice to identify the calendar year before the issuance of offset credits, and to assign attributes at the time of issuance. For offset credits that were already issued before the program became an eligible program under the CORSIA, these steps may be conducted after issuance.

*Rationale and context: To effectively avoid double claiming, it is necessary to identify the calendar year in which the offset credits' emission reductions or removals occurred. This allows assessing whether an offset credit's emission reductions or removal fall within a period that is covered by an NDC. It also facilitates the robust accounting for the use of offset credits over time, in particular in the context of single-year targets.*

### II.6.4 Identification of whether a project and its emission reductions or removals are covered by NDC targets

To understand whether and how a project contributes to or hinders achieving a country's NDC target and to effectively implement, report, and reconcile the application of adjustments, programs should establish standards and procedures for identifying whether a project and its associated emission reductions or removals are covered by NDC targets. This should include:

- ▶ The identification of relevant NDC targets; and
- ▶ The identification of whether the offset credit's associated emission reductions or removals are covered by identified NDC targets.

This assessment should be based on information about the project and information provided by the relevant countries, including in their NDCs and biannual transparency reports, as well as any clarifications by countries on their NDCs.

*Rationale and context: A systematic identification of whether a project involves activities or emission reductions or removals that are covered by NDC targets is necessary for two purposes. First, this information provides **transparency** on whether a project could affect, or has affected, a country's progress towards achieving its NDC targets. This information is important for the countries where the project's associated emission reductions or removals occur, regardless of how and under which conditions adjustments are applied. It helps countries to plan the achievement of their NDC targets and understand how the implementation of projects might affect their progress towards NDC targets. Transparency may also be useful for the wider public. Second, this information may be needed for countries to **apply adjustments**, as needed in accordance with further guidance to be included in section II.6.5.*

#### II.6.4.1 Relevant types of NDC targets

Countries have communicated in their NDCs a variety of climate change mitigation targets. These include GHG targets, such as absolute GHG emission targets, as well as targets in non-GHG metrics, such as a target for the amount of renewable electricity generation or a target for the number of clean cook stoves to be installed. The targets are also quantified in different ways, including:

- ▶ Absolute targets, i.e. targets that specify an absolute outcome that should be achieved in a year or period, such as an absolute GHG emissions level relative to a historical year or an absolute level of renewable electricity generation;
- ▶ Relative targets, i.e. targets that specify a relative outcome that should be achieved in a year or period, such as a deviation of GHG emissions from a business-as-usual (BAU) emissions trajectory or a share of renewable electricity generation for a year or period;
- ▶ Intensity targets, i.e. targets that specify an outcome relative to a separate indicator that should be achieved in a year or period, such as a target for the greenhouse gas emissions per unit of gross domestic product (GDP).

In their first NDCs, many countries also communicated GHG targets that are not economy-wide, i.e. the targets do not include all GHGs and/or do not include all emissions sources or sinks in the country. A GHG target may not be economy-wide due to a limited geographical, sectoral, or GHG coverage:

- ▶ Geographical coverage: The target may only cover a certain geographical area.
- ▶ Sectoral coverage: The target may only cover certain sectors, categories of sources of emissions, or removals by sinks, or pools in the case of projects in the land-use, land-use change, and forestry (LULUCF) sector. Sectors and categories included or excluded from GHG targets are sometimes defined based on sector definitions in IPCC Guidelines, such as “waste” or “agriculture,” and sometimes further defined in the NDC.
- ▶ Greenhouse gas coverage: The targets may only cover specific GHGs, such as only CO<sub>2</sub>.

Programs should consider the following types of targets to be relevant for the purpose of providing transparent information (through attributes to the offset credits and/or through a project database – see section II.3) on whether a project and its associated emission reductions or removals are covered by NDC targets:

- ▶ Any GHG targets – including absolute, relative, or intensity-based GHG emissions targets – regardless of whether the project’s associated emission reductions or removals are covered or not covered by the GHG target;
- ▶ Any targets expressed in non-GHG metrics – such as renewable energy targets or energy efficiency targets – if the project’s implementation affects progress towards achieving the target (e.g. it involves or affects activities covered by the target).

Policies or actions that do *not* include targets – such as subsidies to promote renewable energy or laws to enforce the protection of forests – do not need to be considered.

*Rationale and context: Countries have adopted different types of NDC targets, including GHG targets and targets in non-GHG metrics. NDC targets are also quantified in different ways, and include absolute, relative, and intensity targets. All these types of targets can – at least ex-post – be converted to absolute quantitative outcomes. Some countries, in particular Least Developed Countries (LDCs) and Small Island Development States (SIDS), have only communicated actions in their NDCs. A key prerequisite to robustly account for the use of offset credits under CORSIA is, however, that mitigation actions in NDCs are quantified. Without quantification of NDCs, it is not possible to “count” the offset credits used under CORSIA when accounting for NDCs under Article 4.13. Policies and actions that do not involve targets, such as subsidies to promote renewable energy or laws to enforce the protection of forests, are therefore not considered as relevant here. They may, however, be relevant for meeting other CORSIA Emissions Unit Eligibility Criteria, such as assessing the additionality of projects.*

*In addition to identifying any GHG targets, it is recommended to identify targets expressed in non-GHG metrics for two reasons. First, future decisions under the Paris Agreement may require that transfers involving activities covered by such targets must be accounted for (e.g., if mitigation outcomes are transferred associated with renewable energy generation covered by a renewable energy target). This could be done, for example, by applying an adjustment in a metric appropriate to the target, e.g., megawatt-hours of renewable energy generation. Second, even if such adjustments are not required, it could be useful for transparency purposes to understand where a project overlaps with various targets communicated in NDCs.*

#### II.6.4.2 Applicable time periods of NDC targets

The program’s standards and procedures for identifying relevant NDC targets should clearly specify which time period is considered applicable for assessing whether a project and its associated emission reductions or removals are covered by NDC targets.

If future decisions under the Paris Agreement specify the time periods that are applicable for accounting for different types of NDC targets, then programs should apply these time periods.

Until future decisions under the Paris Agreement have specified the applicable time periods, programs should deem the following time periods as relevant:

- ▶ If a country clearly specifies an applicable period for a target, then this period should be used for that target (e.g. Switzerland indicates in its first NDC an applicable period for its GHG target from 2021 to 2030; Armenia indicates a period from 2015 to 2050);
- ▶ If a country communicated a target for the year 2025 only, then the applicable time period for accounting for that target should be 2021 to 2025;
- ▶ If a country communicated a target for the year 2030 or for both 2025 and 2030, then the applicable time period for accounting for that target should be 2021 to 2030.

In assessing the available information, programs should also consider information provided by countries in any updates to their NDCs and in their biennial transparency reports. Note that in some instances countries have communicated different years or periods for different targets included in their NDCs. In this case, the applicable time period should be determined for each target separately.

Emission reductions or removals that occur outside the identified time period(s) should be treated as *not covered*, even if they occur at sources or sinks otherwise included within relevant NDC targets.

*Rationale and context: Paragraph 10 of decision 1/CP.21 foresees that Parties consider “common time frames” for NDCs. At COP24 in Katowice, Parties could, however, not yet agree on this matter but decided that common time frames shall apply to NDCs to be implemented from 2031 onward and that this matter will be further considered (paragraphs 2 and 3 of decision 6/CMA.1). In their first NDCs, many countries have communicated targets for single years. While these targets are only for the indicated years, they usually aim to reflect mitigation action that is taken over a period of time, also referred to as the “time frame and/or period of implementation” of NDCs. If the use of offset credits under CORSIA would only be accounted for in these single years, this could lead to higher global GHG emissions. These Guidelines therefore require that the use offset credits under CORSIA is accounted for over the relevant periods of time.*

### II.6.4.3 Procedural requirements

Programs should establish procedures that project owners and/or program staff should follow to identify relevant NDC targets and to assign attributes to offset credits that provide information on whether a project and its associated emission reductions or removals are covered by NDC targets and their applicable time periods, in accordance with relevant program requirements and these Guidelines.

#### II.6.4.3.1 Identification of relevant NDC targets

Relevant NDC targets should be identified for each country in which an offset credit’s associated emission reductions or removals occurred.

For each country identified in accordance with section II.6.1, the program’s procedures should require project owners and/or program staff to:

- ▶ Assess whether the country’s NDC includes a GHG target as per the guidance in section II.6.4.1;
- ▶ Assess whether the country’s NDC includes any targets in non-GHG metrics that are relevant per the guidance in section II.6.4.1;
- ▶ Identify the relevant time period for each identified NDC target as per the guidance in section II.6.4.2.

In identifying relevant NDC targets, the program’s procedure should require that the latest available and applicable update of the NDC of the country is used. For example, if a country communicated in its first NDC a CO<sub>2</sub> target for the period 2021 to 2030 and communicated a target for all GHGs in its second NDC for the same time period, then the second NDC from that country should be considered.

#### II.6.4.3.2 Assignment of attributes relating to GHG targets

With regard to any GHG target identified, the program’s procedures should specify that:

- ▶ Project owners and/or program staff should:
  1. Describe the coverage and applicable time period of the GHG target;
  2. Systematically compare the sources, sinks, and gases from which the project claims emission reductions or removals with the coverage of the identified GHG target;



3. Determine the share of the offset credit's associated emission reductions or removals that occurred *within* the coverage of the identified GHG target, as well as the share that occurred *outside* the coverage of the identified GHG target; and

► Program staff should:

4. Assign to each offset credit an attribute, based on the shares determined above, indicating whether the offset credit's emission reductions or removals occurred *within* or *outside* the coverage of the GHG target.

#### II.6.4.3.3 Disclosure of potential overlap with targets in non-GHG metrics

With regard to any target in non-GHG metrics identified as relevant in accordance with section II.6.4.1 above, the program's procedures should, for *each* relevant target in non-GHG metrics, require:

► Project owners and/or program staff to:

1. Describe the target and its applicable time period;
2. Where technically possible, describe how the project's implementation affects progress towards achieving the relevant target; and
3. Disclose the above information in a project database maintained by the program (see section II.3.2).

#### II.6.4.3.4 Clarification of NDCs

The program's procedures should also address instances where the nature, scope, or applicable time period of an NDC target is not fully clear. To address such instances, the program may establish procedures for project owners and/or program staff to, *inter alia*:

- Evaluate further information communicated by the country to the UNFCCC, such as biennial transparency reports submitted under Article 13 of the Paris Agreement; and/or
- Seek clarification from the government of the country, e.g. by contacting in writing the relevant focal point of the country.

*Rationale and context: In some instances, the nature, scope or applicable time period of NDC targets is not fully clear. These Guidelines therefore include provisions to address such instances. Paragraph 7 of decision 4/CMA.1 requires countries to provide detailed information on the nature, scope, and applicable time periods of second and subsequent NDCs, and "strongly encourages" countries to provide this information also for their first NDCs when updating them until 2020. This includes information on the "time frames and/or periods for implementation" and the "scope and coverage" (paragraphs 2 and 3 of Annex I to decision 4/CMA.1). Moreover, countries should provide information on the nature, scope, and applicable time periods of NDCs as part of their biennial transparency reports communicated under Article 13 (section III.B and III.C of the Annex to decision 18/CMA.1). In instances where an NDC is not yet clear, it is thus possible that further clarifying information will be provided in updated NDCs or biennial transparency reports. These Guidelines also foresee the possibility to directly request further information from the government of the country.*

#### II.6.4.3.5 Documentation

The program's standards and procedures should require project owners and/or program staff to transparently document the identification of relevant NDC targets and the assignment of respective attributes to each offset credit. To facilitate the assignment of attributes to offset credits, including attributes related to countries (section II.6.1) and calendar years (section II.6.3), it is good practice for programs to require project owners to provide a table that clearly classifies a project's emission reductions or removals according to the different attributes (see **Good practice example 5**).

#### II.6.4.3.6 Timing of identification of relevant NDC targets

Finally, the program's procedures should also clarify *when* relevant NDC targets should be identified. Once a program becomes an eligible program under CORSIA, it is good practice to identify relevant NDC targets before the issuance of offset credits (e.g., including the relevant information in monitoring reports submitted for verification). For offset credits that were already issued before the program became an eligible program under the CORSIA, this step may be conducted after issuance.



### Good practice example 5: Assignment of offset credits to countries and calendar years, and identifying whether the project's emission reductions are covered by NDC targets

A landfill gas capture and utilization project involving activities at multiple sites is implemented in two countries A and B under a programmatic approach. The two countries have separate electricity grids.

The emission reductions in the monitored period occurred from 1 July 2022 to 31 December 2023 (i.e., over 1.5 years). The following emissions sources are included in the calculation of emission reductions, in accordance with the applicable baseline and monitoring methodology:

1. Baseline CH<sub>4</sub> emissions from the landfill sites, occurring in the countries where the landfill gas projects are implemented;
2. Baseline CO<sub>2</sub> emissions from the reduction of electricity generation from fossil fuel fired power plants, occurring in the countries where the landfill gas projects are implemented;
3. CO<sub>2</sub> and CH<sub>4</sub> upstream emissions from the production of fossil fuels used in power plants in the baseline scenario, occurring in a group of coal, oil, and gas producing countries.

The following NDC targets are identified to be relevant for the two countries:

1. Country A: The NDC includes a GHG target covering all sectors and gases;
2. Country B: The NDC includes GHG target covering all sectors but CO<sub>2</sub> only.

In the request for issuance of offset credits by the project owners, the emission reductions are allocated as follows to countries, calendar years, and in relation to NDC targets:

|   | 2022       | 2023       |
|---|------------|------------|
| <b>Total emission reductions</b>  | <b>100</b> | <b>200</b> |
| Emission reductions not requested to be issued as offset credits (CO <sub>2</sub> and CH <sub>4</sub> upstream emissions from the production of fossil fuels) | 10         | 20         |
| <b>Total emission reductions for which offset credits are requested</b>   | <b>90</b>  | <b>180</b> |
| <b>of which occurred in country A</b>   | 30         | 60         |
| which are <i>covered</i> by the GHG target  | 30         | 60         |
| which are <i>not covered</i> by the GHG target  | 0          | 0          |
| <b>of which occurred in country B</b>   | 60         | 120        |
| which are <i>covered</i> by the GHG target (CO <sub>2</sub> baseline emissions)   | 40         | 80         |
| which are <i>not covered</i> by the GHG target (CH <sub>4</sub> baseline emissions)   | 20         | 40         |



## II.6.5 Identification of the need for adjustments

Programs should establish standards and procedures to identify for each offset credit whether an adjustment is needed and to assign a relevant attribute to each offset credit.

The identification of the need for adjustments aims to support countries in conducting the necessary adjustments and helps programs to check, once accounting systems to apply adjustments under the Paris Agreement are in place, whether countries have applied the adjustments (see section II.6.7 below). The identification of the need for adjustments should be based on information about the credited activity and information provided by the relevant countries, including in their NDCs and biannual transparency reports, as well as any clarifications by countries on their NDCs.

The program's standards and procedures should identify the need for an adjustment only if the offset credit's associated emission reductions or removals occurred within the applicable period of the GHG target communicated in the NDC, as determined in accordance with section II.6.4.2 above.

### II.6.5.1 Policies relating to the coverage of emission reductions or removals by GHG targets

If an offset credit's associated emission reductions or removals are covered by a GHG target communicated in the NDC of the country where they occur, then the program's standards and procedures should specify that an adjustment is needed for that offset credit to be used under CORSIA.

*NOTE TO READER: This version of the Guidelines does not address the situation where an offset credit's associated emission reductions or removals are not covered by a GHG target communicated in an NDC. This issue was discussed but not resolved by the working group and may be reconsidered in a future revision of these Guidelines (see also further explanations in section I.4).*

### II.6.5.2 Procedural requirements

Programs should establish procedures that project owners and/or program staff should follow to determine for which offset credits adjustments are needed and to assign relevant attributes to the offset credits, in accordance with relevant program requirements and these Guidelines.

The program's procedures should require that an attribute is assigned to *each* offset credit, indicating whether or not an adjustment is needed. The program's standards and procedures should also require project owners and/or program staff to transparently document the determination of the number adjustments needed, and the respective assignment of attributes to each offset credit.

Finally, the program's procedures should clarify *when* the need for adjustments should be determined and associated attributes should be assigned. For offset credits that were already issued before the program became an eligible program under the CORSIA, these steps may be conducted after issuance (but prior to the cancellation of the offset credits for CORSIA).

## II.6.6 Obtaining a letter of assurance and authorization

Programs should establish standards and procedures that require project owners or the program to obtain, for every registered project, a letter (hereinafter referred to as "letter of assurance and authorization") from a designated focal point of the national government of each country where:

1. The project will cause emission reductions or removals; *and*
2. For which the program issues and qualifies offset credits for use under CORSIA (or other relevant purposes).

A letter of assurance and authorization is not needed from countries where a project reduces emissions or enhances removals, but for which the program does *not* issue offset credits or does *not* qualify them for use under CORSIA.

A letter of assurance and authorization should be obtained regardless of whether the program identifies that an adjustment is needed for the offset credits. Once obtained, programs should make the letter publicly available.

### II.6.6.1 Contents of the letter of assurance and authorization

The letter of assurance and authorization should:

- ▶ Identify the project;
- ▶ Acknowledge that the project may reduce emissions (or enhance removals) in the country;
- ▶ Acknowledge that the program to which the letter is provided has issued, or intends to issue, offset credits for the emission reductions or removals that occur within the country;
- ▶ Authorize the use of the project's emission reductions or removals, issued as offset credits, by aeroplane operators in order to meet offsetting requirements under CORSIA;
- ▶ Declare that the country will not use the project's emission reductions or removals to track progress towards, or for demonstrating achievement of, its NDC and will account for their use by aeroplane operators under CORSIA by applying relevant adjustments.

Box 4 below includes an example of a letter of assurance and authorization with these elements.

The letter of assurance and authorization *may* also:

- ▶ Authorize the use of the project's emission reductions or removals, issued as offset credits, by other countries towards achieving their NDCs;

- ▶ Provide a stipulation regarding the maximum number of the project's emission reductions or removals, issued as offset credits, that the country authorizes for use, including any limits on the time period over which the country provides such authorization;
- ▶ Include a request to the program to provide information to the country on the use of the offset credits;
- ▶ Declare that the country will report on the authorization and use of the project's emission reductions or removals by other countries or entities in a transparent manner in its biennial transparency report submitted under Article 13 of the Paris Agreement.

Box 5 below includes an example of a letter of assurance and authorization that also includes these optional additional elements.

The program's procedures for qualifying offset credits for use under CORSIA (or other relevant purposes), as per section II.8 below, should ensure that an offset credit only be qualified if:

- ▶ A letter of assurance and authorization, including the information listed above, has been obtained from the country where the offset credit's associated emission reductions or removals occurred; and
- ▶ The number of offset credits issued by the program and qualified for use under CORSIA (or other relevant purposes) does not yet exceed any limit established in the letter of assurance and authorization, as applicable.

#### BOX 4: Example of a letter of assurance and authorization for using offset credits under CORSIA

Government of country X

To program Y

##### **Letter of assurance and authorization related to project Z**

With regard to the project Z, as described in the project documentation attached to this letter, we hereby acknowledge that the project may reduce emissions in country X and that program Y has issued, or intends to issue, offset credits for these emission reductions.

We hereby authorize that the project's emission reductions, issued as offset credits by program Y, may be used by aeroplane operators to meet offsetting requirements under CORSIA. We hereby declare that country X will not use the project's emission reductions 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 by aeroplane operators under CORSIA 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.

*Rationale and context: Obtaining an official letter of assurance and authorization ensures that national governments are aware of a project, and of the possible need to apply adjustments in order for the project's offset credits to be used to meet CORSIA offsetting requirements. Regardless of whether a formal adjustment is needed, it is good practice for countries to track the use of a project's emission reductions or removals by other countries or entities, and to report on the authorization and use of the emission reductions or removals in conjunction with national inventory reports so that any use by other countries or entities is made transparent. Countries could therefore also declare in the letter that they will report this information.*

*Moreover, project owners or programs could seek to obtain from countries a broader authorization, which includes different possible uses of the offset credits, including by other countries.*

*This may provide greater flexibility to project owners to whom they ultimately sell offset credits.*

*For transparency, and to address possible risks of "over-transferring" reductions, countries may wish to indicate the maximum amount of the project's emission reductions or removals they endorse for use by other countries or entities. The letter could, for example, include a table indicating the maximum quantity of offset credits that the country endorses in each calendar year to be issued for a project, differentiated between reductions or removals occurring within and outside the coverage of its GHG target. This would provide full clarity regarding what the country endorses.*

*Note that also names other than "Letter of assurance and authorization" may be used, as discussed in other fora, as long as the content specified in this section is included in such letters.*

## **BOX 5: Example of a letter of assurance and authorization with further optional elements**

Government of country X

To program Y

### **Letter of assurance and authorization related to project Z**

With regard to the project Z, as described in the project documentation attached to this letter, we hereby acknowledge that the project may reduce emissions in country X and that program Y has issued, or intends to issue, offset credits for these emission reductions.

We hereby authorize that the project's emission reductions, issued as offset credits by program Y, may be used by aeroplane operators to meet offsetting requirements under CORSIA or by other countries towards achieving their NDC, subject to the following restrictions:

- ▶ We authorize only the use of those project's emission reductions, for which program Y has issued or will issue offset credits, that occur in the period from 1 January 2021 to 31 December 2030; and
- ▶ We authorize only the use of a maximum of 50,000 tCO<sub>2</sub>e of the project's emission reductions, issued as offset credits by program Y, for each calendar year.

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

We hereby declare that country X will not use the project's emission reductions 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 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, subparagraph (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 emission reductions by other countries or entities in a transparent manner in the country's biennial transparency report submitted under Article 13 of the Paris Agreement.

### II.6.6.2 Timing of the letter of assurance and authorization

The program's standards and procedures should also clarify *when* the letter of assurance and authorization should be obtained. Programs should obtain the letter prior to qualifying offset credits from the project for use under CORSIA.

### II.6.6.3 Anti-corruption policies and practices

Programs should also adopt policies that require its own employees, sub-contractors, as well as project owners to commit to anti-corruption policies and practices with regard to letters of assurance and authorization. Letters of assurance and authorization should not be obtained through corrupt means, such as bribery or blackmail of public officials or other projects. In establishing relevant policies, it is good practice that programs draw upon the definitions and approaches of the United Nations Convention Against Corruption.<sup>9</sup> Programs must also comply with applicable national laws relating to corruption. Where corrupt practices are identified these should be immediately communicated to ICAO and the qualification of offset credits for use under CORSIA should be suspended.

In some instances, a commercial arrangement may be reached between the project owners and the host country. For example, a host country may adopt policies to raise revenues from the implementation of projects in a transparent, free, and open manner. Programs should define the circumstances under which they qualify offset credits subject to such policies for use under CORSIA, based on the transparency and application of the policy to all project owners.

## II.6.7 Obtaining evidence of the application of adjustments by countries

For any offset credit designated as needing an adjustment in accordance with section II.6.5, programs should take action to obtain evidence of the appropriate application of adjustments from the country in which the offset credit's associated emission reduction or removal occurred. Programs should therefore establish procedures and standards to obtain evidence whether countries have appropriately applied adjustments.

9 <https://www.unodc.org/unodc/en/corruption/uncac.html>

### II.6.7.1 Obtaining evidence of the application of adjustments

Offset credits may be qualified for use under CORSIA following the receipt of the letter of assurance and authorization from the host country, as long as this does not infringe on any future CMA decisions. However, for any offset credits for which an adjustment is needed, in accordance with section II.6.5 above, programs should take action to obtain evidence of the application of the adjustment. To obtain evidence of the application of an adjustment, programs should verify that:

The relevant country has established and is operating an accounting system for recording adjustments, and the adjustment was recorded appropriately in the accounting system and reported in the structured summary referred in paragraph 77d of the Annex to decision 18/CMA.1 and paragraph 17 of decision 4/CMA.1 (see Annex III.3 for an example of possible elements of a national accounting system and information to be included in the structured summary);

Any adjustment identified as needed in accordance with the guidance set forth in section II.6.5 was applied for the offset credit and reported in the structured summary referred in paragraph 77d of the Annex to decision 18/CMA.1 and paragraph 17 of decision 4/CMA.1;

The application of the adjustment is representative for the use of offset credits over time (see Annex III.4 for further considerations).

Programs may use a variety of means to request and obtain evidence of adjustments. Evidence could, for example, be provided in the form of a letter or certificate (e.g., physical or electronic) from the relevant country indicating that the required adjustments have been applied within the relevant accounting system. Any evidence should clearly reference the offset credits (e.g., using unique identifiers or serial numbers) for which the country has applied the adjustments.

Once a program has obtained evidence of the appropriate application of the needed adjustments, it should assign an attribute to the relevant offset credits indicating that the needed adjustments have been applied.

The program's standards and procedures should also clarify *when* the program should take action to obtain evidence of the application of adjustments by countries. Programs should take action to obtain this evidence no later than one year after the point in time when the application of adjustments is required to be reported by the country in the structured summary included in its biennial transparency report communicated under Article 13 of the Paris Agreement. Programs should



transparently document in the project database or other online information system what action they took to obtain evidence and what evidence was received.

*Rationale and context: Avoiding double claiming requires that the countries where a project's emission reductions or removals occur apply any needed adjustments in order to account for the use of offset credits under CORSIA. Programs should therefore check whether the needed adjustments have been applied appropriately. It is currently unclear when countries will have accounting systems in place to record adjustments. To ensure that offset credits will be available for use under CORSIA in the early years of the scheme, these Guidelines recommend that programs can qualify offset credits for use under CORSIA before an adjustment has been applied by the relevant country. In this case, programs should, however, take action to obtain the evidence at a later stage, taking into account when the application of adjustments will be reported under the Paris Agreement. At some point in the future it is possible that accounting systems will be sufficiently advanced to allow for recording of adjustments on a continuous basis (at the point in time when they are authorized by the host country). In this case, the program would simultaneously receive authorization for CORSIA qualification as well as evidence of the corresponding adjustment.*

#### II.6.7.2 Course of action if evidence of the application of adjustments cannot be obtained

In the case that evidence for the appropriate application of adjustments, as described in section II.6.7.1 above, cannot be obtained by the program within two years after the adjustments were due to be reported by the country in the structured summary included in its biennial transparency report communicated under Article 13 of under the Paris Agreement, it is good practice that programs:

- ▶ Cease qualifying offset credits from the respective country for CORSIA, until the application of adjustments is duly implemented and reported; and
- ▶ Inform the UNFCCC and ICAO accordingly.

*Rationale and context: If programs are unable to obtain evidence of the application of adjustments, this could raise questions about the validity of offset credits used by aeroplane operators or other countries, which in turn creates market risk that could affect development, investment and pricing of new projects for CORSIA. Mitigation of risk and clarity on liability in this scenario will be essential to the effective functioning of carbon markets for CORSIA. In addition to informing the UNFCCC and ICAO when evidence of adjustments cannot be obtained, programs may wish to explore other means to manage risk, including mechanisms to provide insurance to offset credits holders (e.g., through buffer pools), or other ways to indemnify different parties to offset credit transactions.*

## II.7 STANDARDS AND PROCEDURES FOR AVOIDING DOUBLE CLAIMING WITH MANDATORY DOMESTIC CLIMATE CHANGE MITIGATION TARGETS

In addition to avoiding claiming with climate change mitigation under the Paris Agreement, programs should also establish standards and procedures to avoid double claiming with mandatory domestic climate change mitigation targets in order to qualify offset credits for use under CORSIA.

It is good practice that double claiming with such domestic targets be avoided if:

- ▶ They are expressed as a target for a defined group of installations, entities, or sinks and sources, such as an ETS or a renewable electricity generation quota; and
- ▶ They are legally binding through respective laws or regulations.

*Rationale and context: Some countries have aspirational national mitigation goals which are, however, not implemented through respective laws or regulations, whereas some countries have national climate targets that are legally binding and implemented through respective laws. The Guidelines consider only targets as relevant if they are legally binding.*

A project's overlap with such targets could be seen as a question relating to additionality or as a question relating to the avoidance of double counting. Accordingly, programs may address this overlap through any of the following options:

- ▶ Requiring that, if offset credits are associated with activities or emission reductions/removals that are covered by these targets, the activities or emission reductions/removals are not counted towards the achievement of these targets (e.g. by cancelling ETS allowances to the extent that the project reduces emissions from sources and gases covered by the ETS);
- ▶ Not issuing offset credits for activities or emission reductions or removals that are covered by these targets (e.g., treating them as "non-additional" per the program's eligibility rules and methodologies); or
- ▶ Not qualifying offset credits for use under CORSIA if the associated activities or emission reductions or removals are covered by these targets.





### Good practice example 6: Expansion of the scope of an Emissions Trading System

A program requires that double claiming is avoided with any Emissions Trading Systems (ETSs) in the countries where credited emission reductions or removals occur. Initially, the ETS in country X includes only CO<sub>2</sub> emissions from power plants. As of 1 January 2025, the scope is expanded to also include CO<sub>2</sub> emissions from clinker production. It is good practice that any project that reduces emissions from clinker production must avoid double claiming with the ETS for those emission reductions that occur as of 1 January 2025.

The program's standards and procedures should also clarify which time periods related to mandatory domestic targets should be considered relevant. It is good practice to treat as relevant the time period in which regulated entities have to fulfil obligations to comply with the targets (e.g. the phases of an ETS or the applicable time period of a renewable energy quota).

The program's standards and procedures should also ensure that newly adopted or implemented targets are identified in a timely manner and double claiming is avoided as of the date of their applicability, and for the duration of their applicability (see Good practice example 6).

## II.8 PROCEDURES FOR THE QUALIFICATION OF OFFSET CREDITS FOR USE UNDER CORSIA

If a program intends to issue, or has already issued, offset credits for which not all double counting requirements set out in these Guidelines are satisfied (e.g. because meeting such requirements is not necessary for their use outside of CORSIA), then the program should establish a procedure under which project owners or offset credit holders can request that offset credits be qualified for meeting offsetting requirements under the CORSIA. The procedure should ensure that offset credits are not qualified by a program for use under CORSIA unless all CORSIA-related program requirements have been satisfied. It is good practice that the procedure:

- Includes a checklist of all requirements that need to be satisfied (see **Good Practice Example 7**);

- Ensures that the fulfilment of program requirements is demonstrated through appropriate supporting documentation (e.g. letters of assurance and authorization by the relevant countries);
- Stipulates that relevant information – including requests by project owners to qualify offset credits for use under CORSIA – is made publicly accessible through a registry, project database, or other online information system;
- Enables corrective actions in the case that offset credits were wrongly qualified for use under CORSIA.

If the program concludes that all relevant program requirements have been fulfilled, it should assign an attribute to the relevant offset credits indicating that they are qualified for meeting offsetting requirements under CORSIA.

*Rationale and context: Offset credits issued by programs are often used for multiple purposes. In some instances, these different uses may involve different requirements. Not all offset credits issued by a program may satisfy all relevant requirements for avoiding double counting under the CORSIA. In this case, offset credits for which all program requirements for avoiding double counting have been met should be clearly identified as such. If a program intends to issue, or has already issued, offset credits for which not all double counting requirements set out in these Guidelines are satisfied (e.g. because meeting such requirements is not necessary for their use outside of CORSIA), then the programs should establish a procedure for qualifying offset credits for use under CORSIA and clearly specify which substantive requirements must be satisfied for offset credits to be qualified. Programs could establish certain minimum requirements that all projects have to satisfy in order to issue offset credits, and additional requirements that must be satisfied in order for offset credits to be qualified by the program for use under CORSIA. The requirements arising from the CORSIA Eligible Emissions Unit Criteria could partially belong to the minimum requirements applicable to all offsets issued by the program and partially to the specific additional requirements to qualify an offset credit for use under CORSIA.*



## Good practice example 7: Checklist for qualifying offset credits for use under CORSIA

| Requirement   | Checks  |
|---|---|
| <b>Avoiding double issuance</b>   | <ul style="list-style-type: none"> <li>✓ Offset credits were issued only after final program approval of verification reports and any other supporting documentation</li> <li>✓ The project is not registered more than once with the program</li> <li>✓ If a project is registered with more than one program, offset credits are cancelled by one program before offset credits are issued by another program for the same emission reductions or removals</li> </ul>                   |
| <b>Identification of countries</b>  | <ul style="list-style-type: none"> <li>✓ The countries where the offset credit's associated emission reductions or removals occurred are identified</li> <li>✓ The offset credit's emission reductions or removals are allocated proportionally to the countries where they occurred</li> <li>✓ Each offset credit is assigned an attribute indicating the country where the emission reductions or removals occurred</li> </ul>  |
| <b>Identification of calendar years</b>   | <ul style="list-style-type: none"> <li>✓ The calendar in which the offset credit's associated emission reductions or removals occurred is identified and an associated attribute is assigned to the offset credit</li> </ul>  |
| <b>Identification of whether a project is covered by NDC targets</b>                      | <ul style="list-style-type: none"> <li>✓ For each identified country, all relevant targets in NDCs and their applicable time periods are identified and described</li> <li>✓ Each offset credit is assigned with an attribute indicating whether its associated emission reductions or removals are covered by a GHG target communicated in NDCs</li> <li>✓ Potential overlap of a project with targets in non-GHG metrics is identified and disclosed in the project database</li> </ul> |
| <b>Identification of the need for adjustments</b>   | <ul style="list-style-type: none"> <li>✓ For each offset credit it is identified whether or not an adjustment is needed and an associated attribute is assigned to the offset credit</li> </ul>   |
| <b>Obtaining a letter of assurance and authorization</b>                                  | <ul style="list-style-type: none"> <li>✓ A letter of assurance and authorization, including all relevant information and declarations, has been obtained from the country (or countries) in which each offset credit's associated emission reductions or removals occurred</li> <li>✓ Any limits on the use of emissions reductions from the project, specified in the letter of assurance and authorization, are complied with</li> </ul>  |
| <b>Avoiding double claiming with mandatory domestic climate change mitigation targets</b> | <ul style="list-style-type: none"> <li>✓ Any relevant mandatory domestic targets, and a project's overlap with such targets, are identified</li> </ul> <p>Double counting with mandatory domestic targets is avoided</p>  |

## II.9 PROGRAM REPORTING

Programs should regularly publish reports that provide aggregated information related to the issuance and cancellation of offset credits. The publication of these reports can enhance transparency and help countries in implementing adjustments and reporting on the use of offset credits for CORSIA.

It is good practice that programs publish these reports at least annually, within six months after the end of a calendar year, and that they transmit the reports to all countries in which the emission reductions or removals associated with issued offset credits occurred.

Programs should aggregate relevant information in different ways to ensure transparency and provide assurance that double counting has effectively been avoided. Annually reported information should include, at a minimum:

**1. Total issued offset credits by country, calendar year, and the need for application of adjustments:** Programs should report – broken out by country, calendar year, and the need for an adjustment – the quantity of offset credits:

- ▷ Issued;
- ▷ Issued and for which countries have authorized the use of the associated emission reductions or removals by other countries or entities, as specified in the countries' letters of assurance and authorization (see section II.6.6);
- ▷ Qualified by the program for use under CORSIA;
- ▷ Cancelled to meet offsetting requirements under the CORSIA;
- ▷ Cancelled for purposes other than meeting offsetting requirements under the CORSIA.

**2. Total cancelled offset credits by aeroplane operator:**

To prevent double use, programs should provide – broken out for each aeroplane operator for which offset credits were cancelled and for each compliance period for which an offsetting requirement has to be satisfied under the CORSIA – the number of offset credits that were cancelled to meet offsetting requirements under the CORSIA.

**3. The maximum number of emission reductions or removals, from projects registered with the program, authorized by countries for use by other countries or entities, by country and calendar year.** It is good practice for programs to also report, by country and calendar year, the maximum number of offset credits – for all projects registered with a program, in aggregate – that could potentially be issued and used by other countries or entities, based on the limits established by countries in letters of assurance and authorization obtained for each project (see section II.6.6). This reporting should include both past and future years.

If the program and a country where the offset credit's associated emission reductions or removals occurred use different GWP values in their emissions accounting, the program should also provide the information under item 1 above for the relevant country using the GWP values that the country uses (e.g. the number of offset credits that would have been issued or cancelled if the GWP values of the country would have been applied).

*Rationale and context: The regular publication of reports with aggregated information can facilitate the avoidance of all forms of double counting. The countries where the emission reductions or removals occur require information on the issuance and use of offset credits for the purpose of applying adjustments. Aggregated information on the issuance and use of offset credits is also required to reconcile and compare the use of offset credits under CORSIA with the adjustments applied by countries.*

*In addition, although it is outside the scope of these Guidelines, members of the working group that developed these Guidelines agreed that it would be good practice for countries to track the use of a project's emission reductions or removals by other countries or entities, and to report on the authorization and use of the emission reductions in biennial transparency reports submitted under Article 13 of the Paris Agreement (see Annex III.3) for an example how such reporting may be conducted by countries). This could be done regardless of whether an adjustment related to the emission reductions or removals must be applied, and would help to ensure that any use by other countries or entities is made transparent. Reporting by programs of aggregated information on the issuance and use of offset credits could help to facilitate this kind of reporting by countries.*

*To facilitate robust reporting and accounting by countries, programs should moreover report the associated emission reductions using the GWP values applied by the countries where the emission reductions or removals occurred in their structured summary (see also section II.4 above).*

# ANNEXES

## III.1 LIST OF MEMBERS OF THE AVOIDING DOUBLE COUNTING WORKING GROUP



**American Carbon Registry:**  
Mary Grady, John Kadyszewski



**Gold Standard:**  
Owen Hewlett, Richard Iliffe, Vikash Talyan



**Carbon Market Watch:**  
Gilles Dufrasne, Aki Kachi, Kelsey Perlman



**International Emission Association:**  
Dirk Forrister, Sophy Greenhalgh, Eva Weightman



**Climate Action Reserve:**  
Max DuBuisson



**Verra: Sam Hoffer:**  
Jerry Seager



**Environmental Defense Fund:**  
Annie Petsonk, Kristin Qui



**World Wildlife Fund:**  
Brad Schallert

## III.2 CHECKLIST FOR CARBON OFFSET-CREDITING PROGRAMS TO AVOID DOUBLE COUNTING

The checklist below can help programs adopt and incorporate the necessary requirements.

**TABLE 3:** Checklist for the incorporation of the provisions set forth in these Guidelines into program documents and operations

| Requirement   | Check |
|---|-------|
| <p><b>Registry capabilities:</b></p> <p>Capable of securely and transparently issuing, transferring, and cancelling offset credits</p> <ul style="list-style-type: none"> <li>▶ Allows the tagging of each offset credit with a unique identifier (e.g., serial number)</li> <li>▶ Makes relevant information on offset credits available to users and the public, including: <ul style="list-style-type: none"> <li>▷ Information in Field 5 of Table A5-7 of the ICAO SARPs</li> <li>▷ Associated project, including unique identifying information about the project</li> <li>▷ Country where emission reductions/removals occurred</li> <li>▷ Calendar year when emission reductions/removals occurred</li> <li>▷ Indication of whether associated emission reductions are covered by a GHG target communicated in a country's NDC</li> <li>▷ Indication of whether an adjustment is needed to avoid double counting</li> <li>▷ Indication of whether the country has applied an adjustment (if needed) related to the use of the offset credit</li> <li>▷ Indication of whether the country has issued a letter of assurance and authorization for the offset credit's associated project</li> <li>▷ Indication of whether the offset credit has been qualified by the program for use under CORSIA</li> <li>▷ Indication of whether the offset credit has been cancelled and, if so, the purpose and date of the cancellation</li> </ul> </li> <li>▶ Cancellation of offset credits is clearly indicated, irreversible, and unambiguously designated for an intended purpose</li> </ul> |       |





| Requirement  | Check |
|--|-------|
| <p><b>Project database capabilities</b></p> <ul style="list-style-type: none"><li>▶ Is easily searchable for information on projects and status of credits</li><li>▶ Contains the following information and documentation for each project to which the program issues offset credits:<ul style="list-style-type: none"><li>▷ Description of the project</li><li>▷ Emission sources, sinks, and GHGs included in the calculation of the project's emission reductions or removals, along with the location(s) of all relevant sources and sinks</li><li>▷ The country and geographical location where the project is implemented</li><li>▷ Any other information needed for the project to be unambiguously identified, and distinguished from other projects that may occur in the same location</li><li>▷ An indication whether the project's mitigation activities, emission reductions, and/or removals are covered by any targets – including targets expressed in non-GHG metrics – communicated in a country's NDC</li><li>▷ The letter of assurance and authorization from the country or countries where the project's emission reductions or removals occurred, once obtained</li><li>▷ The project owners</li></ul></li></ul> |       |
| <p><b>Policies on global warming potentials (GWP)</b></p> <ul style="list-style-type: none"><li>▶ Program uses:<ul style="list-style-type: none"><li>▷ 100-year time-horizon values from the IPCC 4<sup>th</sup> assessment report, for emission reductions or removals that occur before 1 January 2021; or</li><li>▷ 100-year time-horizon values from the IPCC 5<sup>th</sup> assessment report, for emission reductions or removals that occur on or after 1 January 2021 or, if applicable, any other common GWP values adopted for future periods in relevant decisions by the CMA;</li></ul></li><li>▶ The time periods for which GWP values will be applied are clearly specified</li><li>▶ GWP values are consistently applied for all emission reductions, countries, and projects</li></ul>   |       |
| <p><b>Standards and procedures for avoiding double issuance</b></p> <ul style="list-style-type: none"><li>▶ Standards and procedures are in place that ensure that offset credits are issued only after final program approval of verification reports and any other supporting documentation</li><li>▶ Quantification standards and project eligibility criteria ensure that overlapping emission reduction or removal claims are avoided</li><li>▶ Standards and procedures are in place that, if a project is registered with more than one program, offset credits are cancelled by one program before offset credits are issued by another program for the same emission reductions or removals</li></ul>   |       |

## Requirement

## Check

### Standards and procedures for avoiding double claiming with climate change mitigation under the Paris Agreement

- ▶ General program policies for avoiding double counting are clearly identified, along with the conditions or circumstances in which they will be followed
- ▶ Standards and procedures are in place for identifying countries where the emission reductions or removals occurred, and assigning attributes to offset credits accordingly
- ▶ Standards and procedures are in place for identifying the calendar years in which the emission reductions or removals occurred, and assigning attributes to offset credits accordingly
- ▶ Standards and procedures are in place for identifying whether a project and its emission reductions or removals are covered by NDC targets, including standards and procedures for:
  - ▷ Identifying relevant NDC targets, including both GHG targets and targets expressed in non-GHG metrics
  - ▷ Identifying applicable time periods of NDC targets
  - ▷ Assigning attributes to offset credits related to coverage by GHG targets
  - ▷ Disclosing potential overlap with targets in non-GHG metrics
- ▶ Standards and procedures are in place to identify the need for adjustments, including:
  - ▷ Policies relating to the coverage of emission reductions or removals by GHG targets, consistent with relevant decisions by the CMA
  - ▷ Procedures for identifying offset credits for which adjustments are needed and assigning attributes to each offset credit accordingly
- ▶ Standards and procedures are in place for:
  - ▷ Obtaining a country letter of assurance and authorization, regardless of whether an adjustment is needed for a project's emission reductions or removals
  - ▷ Qualifying offset credits for use under CORSIA only if a letter of assurance and authorization has been obtained and the number of offset credits already qualified does not exceed any limit established in the letter
  - ▷ Following anti-corruption practices with regard to letters of assurance and authorization
- ▶ Standards and procedures are in place for:
  - ▷ Taking action to obtain evidence of the application of adjustments by countries
  - ▷ Taking relevant action if adjustments are not applied



| Requirement   | Check |
|---|-------|
| <p><b>Standards and procedures for avoiding double claiming with mandatory domestic climate change mitigation targets</b></p> <ul style="list-style-type: none"><li>▶ Standards and procedures are in place for:<ul style="list-style-type: none"><li>▷ How overlaps with mandatory domestic climate change mitigation targets will be addressed</li><li>▷ Clarifying the relevant time periods for mandatory domestic climate change mitigation targets</li></ul></li></ul>  |       |
| <p><b>Procedures for the qualification of offset credits for use under CORSIA</b></p> <ul style="list-style-type: none"><li>▶ If a program intends to issue, or has already issued, offset credits for which not all double counting requirements set out in these Guidelines are satisfied (e.g. because meeting such requirements is not necessary for their use outside of CORSIA), a procedure is specified under which project owners or offset credit holders can request that offset credits be qualified for meeting offsetting requirements under the CORSIA</li><li>▶ The procedure ensures that all program requirements relating to the avoidance of double counting for CORSIA are satisfied</li></ul> |       |
| <p><b>Program reporting</b></p> <ul style="list-style-type: none"><li>▶ Policies and procedures are in place to regularly publish reports that provide aggregated information related to the issuance and cancellation of offset credits, including:<ul style="list-style-type: none"><li>▷ Total issued offset credits by country, calendar year, and the need for application of adjustments</li><li>▷ Total cancelled offset credits by aeroplane operator</li><li>▷ The maximum number of emission reductions or removals, from projects registered with the program, authorized by countries for use by other countries or entities, by country, and calendar year</li></ul></li></ul>                         |       |

### III.3 EXAMPLE OF THE TYPE OF INFORMATION THAT COULD BE INCLUDED IN STRUCTURED SUMMARIES

Parties to the Paris Agreement have to prepare as part of their biennial transparency reports a “structured summary,” as referred to in paragraph 77d of the Annex to decision 18/CMA.1. This section illustrates with an example the type of information that could be included in this structured summary. For purposes of this example, only the case of offset credits originating from emission reductions covered by NDCs is addressed. Paragraph 77d, sub-paragraph (ii), of the Annex to decision 18/CMA.1, specifies that adjustments are applied to the “level of anthropogenic emissions by sources and removals by sinks covered by its NDC,” and this example adheres to that specification.

These Guidelines suggest that it would be good practice for countries to report in a transparent manner the amount of emission reductions or removals occurring within their jurisdiction that are used by aeroplane operators to meet offsetting requirements under the CORSIA, regardless of whether the offset credit’s associated emission reductions or removals occur within or outside the coverage of a GHG target. This example only addresses emission reductions that are covered by NDCs, noting that the ADC Working Group has not concluded its considerations on emission reductions that are not covered by NDCs.

To provide transparent information on the use of offset credits by aeroplane operators under the CORSIA, as well as information on international transfers of mitigation outcomes between countries, the example illustrates a format where information is disaggregated by Parties, aeroplane operators, and programs. Net GHG emissions are reported with and without reflecting internationally transferred mitigation outcomes and the use of emissions units under CORSIA.

The following information may be included by a country for each calendar year in relevant accounts:

- ▶ Total national net GHG emissions according to the GHG inventory report prepared under Article 13.7, sub-paragraph (a), of the Paris Agreement;
- ▶ Total level of GHG emissions covered by the country’s NDC (which is used as the basis for applying adjustments, consistent with paragraph 77d of the Annex to decision 18/CMA.1);

- ▶ Where applicable, the target level for the year (e.g. X metric tonnes of CO<sub>2</sub>e emissions);
- ▶ Number of adjustments applied to account for mitigation outcomes internationally transferred to other countries, disaggregated by country;
- ▶ Number of adjustments applied to account for mitigation outcomes acquired from other countries, disaggregated by country;
- ▶ Number of adjustments applied to account for the use of offset credits under CORSIA, disaggregated by program and aeroplane operator;
- ▶ The total amount of units authorized by the country for use by other countries towards achieving NDCs or by aeroplane operators for meeting offsetting requirements under CORSIA;
- ▶ The total adjusted net GHG emissions covered by the country’s NDC, which can then be compared with the target level;
- ▶ For transparency and information purposes, the total *national* net GHG emissions, including additions for units transferred to other countries or used under CORSIA and subtractions for units acquired from other countries.

To implement, track, and report these activities, countries will have to establish accounting systems. The *timing* of entries to the accounts of these accounting systems may vary depending on the purpose of the account. Reporting and international review of GHG emissions and other indicators to track progress towards achieving mitigation targets typically takes several years. To ensure that aeroplane operators can meet their offset requirements in time while avoiding double claiming, countries could separate the timing of the application of relevant adjustments in the accounting system from the timing of the international reporting and review of GHG emissions and other indicators to track progress towards achieving mitigation targets. Entries to accounts for the transfer of mitigation outcomes between countries or the use of offset credits under CORSIA could be recorded on an ongoing or regular basis. Entries to accounts for reported progress, such as national GHG inventory information, may only be made ex-post, after the submission and review of relevant reports under the Paris Agreement. In this context, Parties to the Paris Agreement also need to address which specific action should *trigger* the application of an adjustment (e.g. when a program reports the cancellation of an offset credit for CORSIA purposes) and in which calendar year the adjustment should then be recorded in the structured summary (e.g. the calendar year in which the emission reductions or removals occurred).

Box 6 presents a numerical example where some of the reporting elements above are included.

## BOX 6: Example of information that could be included in the structured summary referred to in paragraph 77d of decision 18/CMA.1

The country has communicated in its NDC a GHG target that covers only some sectors or gases. This box illustrates an example in which offset credits are generated from emissions reductions that occur within the coverage of its GHG target. The offset credits are used by two countries A and B as well as by aeroplane operators X and Y under CORSIA:

|  | Year X     |
|--|------------|
| <b>A. Total reported net GHG emissions (A1+A2)</b>   | <b>500</b> |
| A1. Covered by the GHG target  | 400        |
| A2. Not covered by the GHG target  | 100        |
| <b>B. Transfers to other Parties</b>   | <b>60</b>  |
| B1. From emission reductions or removals covered by the GHG target   | <b>60</b>  |
| Transfers to Party A   | 40         |
| Transfers to Party B   | 20         |
| <b>C. Acquisitions from other Parties (C1+C2)</b>  | <b>0</b>   |
| C1. Acquisitions from Party A  | 0          |
| C2. Acquisitions from Party B  | 0          |
| <b>D. Use of offset credits by aeroplane operators under CORSIA</b>  | <b>20</b>  |
| D1. From emission reductions or removals covered by the GHG target   | <b>20</b>  |
| Offset credits issued and cancelled by program X   | 5          |
| Offset credits issued and cancelled by program Y   | 15         |
| <b>E. Total adjusted net GHG emissions covered by the GHG target (A1+B1-C+D1)</b>  | <b>480</b> |
| <b>F. Total national net GHG emissions, including additions for units transferred to other countries or used under CORSIA and subtractions for units acquired from other countries (A+B-C+D)</b> | <b>580</b> |



### III.4 CONSIDERATIONS FOR THE APPLICATION OF ADJUSTMENTS THAT IS REPRESENTATIVE OVER TIME

This Annex provides additional considerations that countries and programs may consider for the purpose of ensuring that the application of adjustments is representative for the issuance and use of offset credits over time.

ICAO established a target of carbon neutral growth that is applicable to all years in the period from 2021 to 2035. The CORSIA thus involves a continuous multi-year target for the period 2021 to 2035. The Kyoto Protocol and its Doha Amendment use a similar approach; they establish continuous multi-year commitment periods (from 2008 to 2012 and from 2013 to 2020). Continuous multi-year targets considerably facilitate robust accounting for transfers.

Under the Paris Agreement, however, many countries communicated single-year targets for 2030, others communicated targets for 2025, and only a few countries communicated targets for a multi-year period.

The mismatch between the multi-year target time frames under CORSIA and the various target time frames in NDCs is a key challenge for robustly accounting for the use of offset credits under CORSIA. For example, if a country has a single-

year target for 2030 and would only apply adjustments for emission reductions or removals occurred in that year, the country could authorize the use of offset credits under CORSIA from emission reductions achieved over the period 2021 to 2029 and use the emission reductions in 2030 to achieve its own NDC. As a result, cumulative aggregated emissions from the country and aeroplane operators would be higher compared to the situation that aeroplane operators would have reduced the emissions otherwise (e.g. through sustainable fuels) or compared to the situation that the country had a multi-year target over the period 2021 to 2030. Where countries do not have continuous multi-year targets, it is therefore critical that adjustments are applied in a manner that is representative for the actual use of offset credits over time.

This could be achieved in different ways:

- ▶ The country could adopt a continuous multi-year target (e.g. 2021 to 2030);
- ▶ The country could establish a multi-year target trajectory (e.g. by linearly interpolating between a 2020 and a 2030 target), and use this trajectory for the purpose of accounting for international transfers of mitigation outcomes and the use of offset credits under CORSIA;
- ▶ The country could adopt an accounting approach where the use of offsets under CORSIA is only accounted for in single-target years but the adjustments in the single-year target are calculated such that they are representative for the use of offset credits under CORSIA over a longer time period (see example in Box 7).

#### BOX 7: Example of a possible approach for accounting for the use of offset credits under CORSIA under a single-year target

**Country A** has communicated in its NDC an economy-wide absolute GHG target for the year 2030. The country only accounts for its NDC target in this year, meaning that the country only establishes an accounting balance for the year 2030. The country authorizes the issuance of offset credits and their use under the CORSIA as well as their transfer to another country B.

**Country B** has also a single-year target for the same year. Country A and B reached an agreement that only offset credits issued for emission reductions that occurred in 2030 are accounted for towards their NDC.

**Country A** also accounts for the use of offset credits under CORSIA only in 2030. To ensure that the amount accounted for

2030 is representative for the use of offset credits under the CORSIA over time, the country allocates only a portion of the total number of offset credits transferred to the CORSIA to the year 2030. The portion that is allocated to 2030 should be representative for the number of offset credits that would on average be used by aeroplane operators in 2030. To allocate the credits accordingly, the country uses the allocation factors for each calendar year in the table (this example is derived from a projection of the development of offset requirements by aeroplane operators over time). This means that if the country has authorized that 100 offset credits be used under the CORSIA over the period 2021 to 2030, it will apply adjustments corresponding to 20 tCO<sub>2</sub>e in 2030.

| Year       | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027  | 2028  | 2029  | 2030  |
|------------|------|------|------|------|------|------|-------|-------|-------|-------|
| Proportion | 1.9% | 3.3% | 4.7% | 6.2% | 7.7% | 9.3% | 13.5% | 15.6% | 17.8% | 20.1% |

## III.5 RELEVANT DECISIONS ADOPTED AT COP24 IN KATOWICE

At COP24 in Katowice, Poland, the first CMA adopted a series of decisions to implement the Paris Agreement. Three decisions are of particular relevance for avoiding double counting for CORSIA. This Annex includes three Boxes (Boxes 8, 9 and 10) that include elements of these decisions that are explicitly referred to in these Guidelines.

### **BOX 8:** Elements of decision 18/CMA.1 on “Modalities, procedures, and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement.

#### **Annex to decision 18/CMA.1**

37. Each Party shall use the 100-year time-horizon global warming potential (GWP) values from the IPCC Fifth Assessment Report, or 100-year time-horizon GWP values from a subsequent IPCC assessment report as agreed upon by the CMA, to report aggregate emissions and removals of GHGs, expressed in CO<sub>2</sub> eq. Each Party may in addition also use other metrics (e.g. global temperature potential) to report supplemental information on aggregate emissions and removals of GHGs, expressed in CO<sub>2</sub> eq. In such cases, the Party shall provide in the national inventory document information on the values of the metrics used and the IPCC assessment report they were sourced from.
77. Each Party shall provide the information referred to in paragraphs 65–76 above in a structured summary to track progress made in implementing and achieving its NDC under Article 4, including: (...)
- (d) Each Party that participates in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards an NDC under Article 4, or authorizes the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC, shall also provide the following information in the structured summary consistent with relevant decisions adopted by the CMA on Article 6:
  - (i) The annual level of anthropogenic emissions by sources and removals by sinks covered by the NDC on an annual basis reported biennially;
  - (ii) An emissions balance reflecting the level of anthropogenic emissions by sources and removals by sinks covered by its NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for internationally transferred mitigation outcomes first-transferred/transferred and a subtraction for internationally transferred mitigation outcomes used/acquired, consistent with decisions adopted by the CMA on Article 6;
  - (iii) Any other information consistent with decisions adopted by the CMA on reporting under Article 6;
  - (iv) Information on how each cooperative approach promotes sustainable development; and ensures environmental integrity and transparency, including in governance; and applies robust accounting to ensure inter alia the avoidance of double counting, consistent with decisions adopted by the CMA on Article 6.

## **BOX 9:** Elements of decision 4/CMA.1 on “Further guidance in relation to the mitigation section of decision 1/CP.21.”

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### **Decision 4/CMA.1**

7. Decides that, in communicating their second and subsequent nationally determined contributions, Parties shall provide the information necessary for clarity, transparency, and understanding contained in annex I as applicable to their nationally determined contributions, and strongly encourages Parties to provide this information in relation to their first nationally determined contribution, including when communicating, or updating it by 2020;
14. Recalls decision 1/CP.21, paragraph 32, which provides that Parties shall apply the guidance for accounting for nationally determined contributions to their second and subsequent nationally determined contributions, and that Parties may elect to apply such guidance to their first nationally determined contribution;
17. Decides that Parties shall account for their nationally determined contributions in their biennial transparency reports, including through a structured summary, consistently with the guidance provided pursuant to Article 13, paragraph 7(b), of the Paris Agreement and any relevant guidance adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement;

### **Annex II to decision 4/CMA.1**

1. Accounting for anthropogenic emissions and removals in accordance with methodologies and common metrics assessed by the Intergovernmental Panel on Climate Change (IPCC) and adopted by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA):
  - (a) Parties account for anthropogenic emissions and removals in accordance with methodologies and common metrics assessed by the IPCC and in accordance with decision 18/CMA.1;

## **BOX 10:** Elements of decision 6/CMA.1 on “Common time frames for nationally determined contributions referred to in Article 4, paragraph 10, of the Paris Agreement.”

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### **Decision 6/CMA.1**

2. Decides that Parties shall apply common time frames to their nationally determined contributions to be implemented from 2031 onward;
3. Requests the Subsidiary Body for Implementation to continue the consideration of common time frames for nationally determined contributions at its fiftieth session (June 2019) with a view to making a recommendation thereon for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement.





**GUIDELINES ON AVOIDING  
DOUBLE COUNTING FOR THE  
CARBON OFFSETTING AND  
REDUCTION SCHEME FOR  
INTERNATIONAL AVIATION**

**Version 1.0 – June 2019**