CORSIA Eligible Emissions Unit Programme Change Notification Form

Version 2.0; Effective from 10 January 2022

Verified Carbon Standard (VCS) Program (April 30th, 2024)

PART A: ABOUT THIS FORM

Once an emissions unit programme is approved by the ICAO Council as eligible to supply CORSIA Eligible Emissions Units, the programme commits to notify the ICAO Secretariat of any "material changes" to its "Scope of Eligibility"*, including any unilateral decision to revoke or invalidate a class of CORSIA- eligible emission units within the programme's Scope of Eligibility,* for further review[1] by the Technical Advisory Body (TAB) that advises the ICAO Council on the eligibility of emissions units for use in CORSIA.

> *TAB Procedures*[2] defines a "Material Change" as an update to a programme's *Scope of Eligibility* that would alter the programme's response(s) to any questions in its application form and further inquiries from the TAB over the course of the programme's assessment, including programme-initiated unit invalidation and/or revocation. (paragraph 7.3.).
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> *TAB Procedures* defines a CORSIA Eligible Emissions Unit Programme's *Scope of Eligibility* as "the extent and limits of a programme's eligibility, which is defined, assessed, and granted on the basis of the programme-level governance structures, measures or mechanisms, and procedures that programmes have in place at the time of their initial submission of application materials to the ICAO Secretariat; and any updates to these procedures that are communicated to TAB during the course of its assessment; and as defined in the general or programme-specific eligibility parameters set out in TAB's recommendations" (paragraph 4.5).

Annually, TAB will indicate deadlines for programmes to notify ICAO of any such material changes. These notifications should be submitted by the next deadline after the material change has occurred; the upcoming deadlines are indicated in the version of the *TAB Work Programme and Timeline* document that is currently effective. This document is available on the CORSIA website[3].

Material changes should be disclosed using this form. TAB will then consider the need for any further review, in line with *TAB Procedures*. If TAB identifies that the change is indeed material and should be further assessed, it will invite public comments on the consistency of the proposed revision with the Emissions Unit Criteria (EUC) and *Guidelines for Criteria Interpretation*. The ICAO Secretariat will inform the programme of TAB's decision to more deeply assess the programme's modification, or its confirmation that the modification is consistent with the CORSIA EUC. The programme will also be

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[1] Any unilateral programme-initiated invalidation and/or revocation of a class of CORSIA-eligible emissions units is considered to be a "material change" to the CORSIA-eligible programme's *Scope of Eligibility*. Such units are regarded as immediately ineligible for use for CORSIA purposes in light of absence of assurance that it will administer the units consistent with its *Terms of Eligibility*. The units will be reflected as exclusions from the programme's *Scope of Eligibility* in the ICAO Document "CORSIA Eligible Emissions Units" upon Council's confirmation of the update. Once a programme notifies ICAO that it wishes to exclude a class of units from its eligibility scope, and in order to provide the most accurate and timely information available prior to Council's confirmation of the update, the ICAO Document "CORSIA Eligible Emissions Units" will identify in a footnote that the programme requested a change to its *Scope of Eligibility* to exclude certain units subject to a decision by the ICAO Council and, if possible, clearly specify the affected class of units. The programme's *Scope of Eligibility* that is deemed valid by the ICAO Council will be reflected in the ICAO Document titled "CORSIA Eligible Emissions Units" in a timely manner

[2] In *TAB Procedures*, paragraphs 4.5, 7.3 and 8.2 – 8.6 in particular pertain to the *Scope of Eligibility* and notification and assessment of material changes.

[3] The *TAB Work Programme and Timeline* and *TAB Procedures* documents are available here: https://www.icao.int/environmental-protection/CORSIA/Pages/TAB.aspx

informed of the date by which the review will be completed. The length of the review should be determined by the severity and scale of the material change.

PART B: PROGRAM CHANGE NOTIFICATION(S)

The Programme is requested to provide the following information regarding any modification(s) to the programme's *Scope of Eligibility* that could constitute a "material change" as described above. Report each change separately by duplicating (copying and pasting) the table below as needed.

Programme name: **Verified Carbon Standard** (VCS)

CHANGE 1: Ineligibility of activities with exemptions to legal additionality requirements
a. Description of the change (e.g., the addition, modification, deletion undertaken):
Section 3.2 of the *CORSIA Label Guidance, v1.0* clearly states that VCUs will only qualify for the CORSIA first phase (2024-2026) if the "VCUs were issued for a project activity that is not mandated by law, statute, or another regulatory framework, regardless of whether it is systematically enforced". A footnote to this text further specifies that "The *VCS Standard* allows projects in UNFCCC non-Annex I countries to qualify as additional if a law, statute, or regulatory framework is not systematically enforced. VCUs from such projects are not eligible for CORSIA scope labels for CORSIA First Phase". This footnote refers to section 3.14.1 of the VCS Standard, v4.7. The acceptance of such projects is addressed in the VCS through the standard itself and not through methodologies or methodological standards. To be clear, the VCS accepts situations in which there is less than systematic enforcement in non-Annex I countries and there will be VCUs that are issued under such circumstances. However, Verra distinguishes project cases in which a lack of systematic enforcement of a law, statute or other regulatory framework has been a factor in the project being found to be additional and will consider these as not falling within the first phase Scope of Eligibility defined for the VCS Program and not eligible for CORSIA's first phase. To simplify the identification of such projects and VCUs, the VCS Project Description and Monitoring templates were updated in August 2023 to clearly identify any projects that only satisfy the regulatory surplus requirement due to non-enforcement of a law. This requirement for CORSIA's first phase was posted on the VCS under CORSIA page of Verra's website in August 2023. It has now been included directly within the *CORSIA Label Guidance, v1.0* to further formalize the requirement. This document is an official VCS Program document. The *CORSIA Label Guidance, v1.0* document has not yet been published as there are several matters in this document on which Verra would appreciate feedback from the TAB before finalizing and publishing the document. Verra is open to finalizing and publishing this document prior to the completion of the TAB assessment process if this is needed, although we note that it will need further updating to include the Scope of Eligibility for CORSIA's first phase when it is confirmed by ICAO. The requirement for CORSIA's first phase will remain posted on the VCS under CORSIA page of Verra's website until the *CORSIA Label Guidance, v1.0* document is published.
b. Rationale for the change:
Verra included this addition in the *CORSIA Label Guidance, v1.0* document to align the VCS Program with the following condition for the eligibility of VCUs under CORSIA's First Phase: "Include in VCS programme documents procedures that VCUs shall not be eligible for the CORSIA first phase (2024-2026 compliance period) if issued to an activity that applies methodologies or methodological standards which allow any exemptions to legal additional requirements, such as in situations where legally binding mandates are systematically not enforced and/or non-compliance is widespread".
c. Where the change is reflected in the Programme's documentation or other resource(s)[4]:

[4] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

CORSIA Label Guidance, v1.0
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
The Material Change Submission of August 2023 stated: "It has been communicated that VCUs will not be considered eligible for the CORSIA First Phase (2024-2026 compliance period) where their assessment of additionality has relied upon an exception to legal additionality rules. "This will be addressed in detailed guidance on the scope of eligibility of VCUs under the First Phase that Verra plans to release when ICAO grants eligibility to VCUs for the First Phase. In the meantime, to make this change known, the CORSIA eligibility page on the website has been updated to include the following clear statement: 'Projects that are required by law, even if not systematically enforced, will not be eligible for use under the CORSIA First Phase. Further guidance on CORSIA labels for VCU vintages of 2021 and later will be available once full CORSIA approval for the First Phase is received.'"
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The document mentioned in (c) is the most up-to-date version of this VCS program document. It includes the specific statement as set out in (a) above on the ineligibility of activities with exemptions to legal additionality requirements, instead of using the Verra website to convey this requirement. Verra is committed to continually updating its program documents as necessary.

CHANGE 2: Prohibition of double-selling
a. Description of the change (e.g., the addition, modification, deletion undertaken):
Addition of provisions to VCS Program documents to explicitly prohibit project developers and other market actors with access to the Verra Registry from double-selling VCUs. *VCS Program Definition, v4.5:* Added the following definition for double selling: "Any situation when one or more entities sell a unit representing the same GHG emission reduction or carbon dioxide removal, such that two or more entities would have the same interest (legal, beneficial or otherwise) in or to that unit at the same time. 'Double Sold' and 'Double Sell' are construed accordingly." *VCS Standard, v4.7*, Section 3.23: The concept description clearly states that the reductions and removals generated by a project must not be double counted or double sold. The concept description also emphasizes that project proponents and all Registry account holders are now prohibited from double selling VCUs through acceptance of the *Verra Registry – Terms of Use*. Registry Terms of Use (TOU), updated April 2024: Section 11.2 has been updated with a clause that explicitly prohibits double selling. A definition for 'Double Selling' was also added in Schedule 1 that aligns with the definition of double selling in the *VCS Program Definitions*.
b. Rationale for the change:
Verra included this addition in the VCS Program documents to align the VCS Program with the following condition for the eligibility of VCUs under CORSIA's First Phase: "Provide evidence to TAB that VCS clearly prohibits Project developers and other market actors with access to its registry from double-selling." VCS Program documents and the Verra Registry TOU have until now focused

on the avoidance of double counting, as an accounting concept. While double selling has always been prohibited, it was not fully spelled out and explicitly addressed in the program documents.

c. Where the change is reflected in the Programme's documentation or other resource(s)[5]:

- *VCS Program Definition, v4.5, the* definition of 'Double Selling'
- *VCS Standard, v4.7*, Section 3.23
- Registry Terms of Use (TOU) (April 2024)

d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:

As this is a new requirement under CORSIA, Verra's previous submissions did not explicitly address this. Double selling has now been fully spelled out in the program documents.

e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:

The documents mentioned in (c) are the most up-to-date version of these VCS program documents. They include explicit references to the avoidance of double selling. Verra is committed to continually updating its program documents as necessary.

CHANGE 3: Updated procedures necessary to prevent double-claiming

a. Description of the change (e.g., the addition, modification, or deletion undertaken):

Verra would greatly appreciate an opportunity for dialogue with the TAB to explore some of the issues we set out below and seek to understand the TAB's perspective. Some specific issues:

1. ***The architecture of CORSIA labels and means to ensure market simplicity and clarity***
2. ***Procedures to compensate for host countries not undertaking their corresponding adjustments and the distribution of actor roles***
3. ***Definition of the scope of eligibility***
4. ***Finalization and publication of the CORSIA Label Guidance, v1.0.***

Planned updates to the CORSIA Label Guidance

The *CORSIA Label Guidance, v1.0* document has been prepared and includes provisions that address all the measures to meet the conditions (c)(i) to (c)(iv) set for Verra by ICAO. The information below for Change 3 indicates the measures that have been included.

The *CORSIA Label Guidance, v1.0* document has not yet been published as there are several matters in this document on which Verra would appreciate feedback from the TAB before finalizing and publishing the document. Verra is open to finalizing and publishing this document prior to the completion of the TAB assessment process if this is needed, although we note that it will need further updating to include the Scope of Eligibility for CORSIA's first phase when it is confirmed by ICAO.

Registry showing whether Article 6 authorized VCUs are within VCS's Scope of Eligibility

Verra operates several labels that are relevant to the use of VCUs for CORSIA:

[5] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

1. **CORSIA scope labels:** These indicate that the VCUs fall within the specified "scope of eligibility" for specific CORSIA phases, noting that this may differ from period to period.
2. **Article 6 Authorized—International mitigation purposes label:** This indicates that the host country has authorized the mitigation outcomes represented by the VCUs for use towards CORSIA obligations. See the *Article 6 Label Guidance* for further information.
3. **CORSIA eligible labels:** These indicate that the VCU is fully eligible for retirement for a CORSIA compliance reason. The VCU is both within the required scope of eligibility for specific CORSIA phases and authorized for use towards CORSIA obligations. A CORSIA eligible label replaces a CORSIA scope label where this is in place.
4. **CORSIA ineligible:** Indicates that a check has been made as to whether the VCUs fall within the known "scope of eligibility" for different CORSIA phases and has been found to not fall within any of them.

The registry will display all labels held by VCUs. At the point that the "Article 6 Authorized—International mitigation purposes label" is to be applied to the VCU, Verra will assess whether the VCU falls within the scope of eligibility for different CORSIA compliance periods. Based on this assessment, Verra will apply either a CORSIA Eligible label(s) for the relevant commitment period(s), or a "CORSIA Ineligible" label. In this manner, the registry ensures that all VCUs with an "Article 6 Authorized—International mitigation purposes label" clearly and transparently shows whether or not the unit is within the VCS's scope of eligibility.

The CORSIA label Guidance, v1.0 emphasizes that the CORSIA scope labels do not indicate that the VCUs are eligible for use against CORSIA and that this is only the case with the combination of the "Article 6 Authorized—International mitigation purposes label" and the CORSIA Eligible label. This will also be displayed prominently on the Verra Registry.

Procedures to respond to changes in the number, scale and scope of host country attestations

The UNFCCC negotiations on this matter are ongoing after not having reached consensus at COP 28 in Dubai in December 2023. We expect that the UNFCCC will provide guidance as to the nature and frequency, possibly including constraints, of any changes to country authorizations that have been provided through letters of authorization (LOAs). We will revise our VCS Program Documentation to take account of any such guidance. In the meantime, Verra is ensuring a simple and flexible procedure for addressing any instances of revised authorizations.

In line with Section 5.1 of the *CORSIA Label Guidance, v1.0*, where a host country wishes to change or update its authorization, it must contact Verra to convey a new LOA and determine whether the change in authorization impacts any labeled VCUs. Where the host country LOA is found to no longer apply to a VCU (e.g., where the number, scale, and/or scope of the host country attestation changes or the authorization provided is revoked or substantially altered), Verra withdraws the Article 6 label and informs the affected account holders, the project proponent, and the host country and posts the information publicly on the Verra Registry.

Procedures to compensate for, replace or otherwise reconcile double-claimed mitigation

Verra requires assurance that double counting will not occur, even where the host country does not apply the corresponding adjustments it has committed itself to undertake. Should such a situation arise, the first action is to inform and remind interested parties to make the corresponding adjustments as soon as possible. Where the situation persists, however, the Article 6 authorization label must be removed from the VCUs and – where the VCUs have already been retired – the lack of corresponding adjustment must be compensated for.

Any removal of Article 6 authorization labels would follow the *Article 6 Label Guidance*. This outlines the conditions under which Verra withdraws an Article 6 label from a VCU. Where a label is withdrawn, Verra immediately informs the affected account holders, the project proponent, and the host country.

Section 4.2 of the *CORSIA Labels Guidance, v1.0*, sets out forms of assurance of compensation that Verra accepts in cases where the Article 6 authorization label has had to have been removed. The strongest assurance is given where it is demonstrated that the host country has already applied a corresponding adjustment covering the mitigation outcomes represented by the VCUs. However, it will take some time for the market to have a supply of VCUs that have already been correspondingly adjusted, as this requires countries to authorize VCUs with first transfer events specified as authorization or issuance, as well as sufficient time for countries to report the associated corresponding adjustments to the UNFCCC. The second form of assurance is a CORSIA Accounting Representation which commits that VCUs used for CORSIA that are not correspondingly adjusted will be compensated. The representation may be provided by the project proponent, buyer, or another entity. Verra requires a certificate of insurance with a Verra-approved corresponding adjustment risk insurance product to underpin the representation. Verra pre-approves acceptable corresponding adjustment insurance products against the criteria set out in Appendix 1 of the *CORSIA Labels Guidance, v1.0* and posts a list on its website. Such CORSIA Accounting Representation and certificate of insurance must be provided to Verra prior to a "CORSIA First Phase (2024–2026) Eligible" label being applied to the VCU. Following the *Article 6 Label Guidance*, Verra monitors submissions to the UNFCCC[6] to determine whether the host country makes the applicable corresponding adjustment(s) for VCUs with Article 6 labels and makes this information public. Where Verra withdraws an Article 6—International mitigation purposes label from a VCU, Verra replaces the CORSIA eligible label with a CORSIA scope label. Where the VCU is active, it is not eligible for retirement for a CORSIA retirement reason unless the Article 6—International mitigation purposes and CORSIA eligible label are restored by meeting the requirements above. Where the VCU has been retired for a CORSIA retirement reason, Verra informs the affected account holders, the project proponent, the ICAO Technical Advisory Body (TAB), and the host country that the mitigation outcomes represented by the VCU are at risk of double claiming by the aircraft operator and the host country. The entity that provided the CORSIA Accounting Representation must compensate for the affected VCUs by canceling an equal number of VCUs, or other EEUs issued by a crediting program approved by Verra, that are eligible for the same CORSIA compliance period. Evidence of this compensation must be provided to the Verra Registry and is posted publicly. Where evidence of such compensation is not provided within 180 days of Verra's notification, Verra suspends the Registry accounts of the entity that provided the CORSIA Accounting Representation or its authorized representative and any further issuance to the project. Such suspensions are lifted when evidence of the compensation has been received and accepted by Verra.
b. Rationale for the change:
Verra included this addition in the VCS Program documents to align the VCS Program with the following condition for the eligibility of VCUs under CORSIA's First Phase: "Develop and put into place a complete suite of procedures necessary to prevent double-claiming, consistent with the criterion *Only counted once towards a mitigation obligation* and the relevant Guidelines, mindful of TAB's considerations and analysis of the COP26 outcomes on Article 6 of the Paris Agreement contained in the document *Clarifications of TAB's Criteria interpretations*. Further actions should address the following: i. Complete the planned updates to the *CORSIA Label Guidance* and submit to TAB as a material change for its assessment;

[6] Including the host country's BTRs and annual information submitted for recording in the Article 6 database

ii. Update the functionality of the VCS Registry to ensure that, for any unit with the label "Article 6 Authorized – International mitigation purposes", the registry clearly and transparently shows whether or not that unit is within VCS's Scope of Eligibility in the document titled "CORSIA Eligible Emissions Units". iii. Establish procedures for the programme to respond to changes to the number, scale, and/or scope of host country attestations; iv. Put in place procedures for the programme or proponents of the activities it supports, to compensate for, replace, or otherwise reconcile double-claimed mitigation associated with units used under the CORSI,A which the host country's national accounting focal point or designee otherwise attested to its intention to not double-claim, such that double claiming does not occur between the airline and the host country of the emissions reduction activity."
c. Where the change is reflected in the Programme's documentation or other resource(s)[7]:
CORSIA Label Guidance, v1.0 Article 6 Label Guidance, v1.0
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
Draft CORSIA Label Guidance, shared in response to questions in the August 2023 material change processes Verra will monitor Parties' submissions to the UNFCCC to assess whether the host Party has made the applicable corresponding adjustments and will make this information public. Verra provides transparent information through the Verra Registry on the status of all VCUs and notifies affected parties of any changes in VCU status. The following provides for cases in which the appropriate corresponding adjustments are not undertaken by host countries: 1. If evidence of appropriate corresponding adjustments pursuant to Article 6 is not observed within **one year** of their required application after VCUs have been retired for CORSIA purposes, Verra will inform the affected account holders to allow time for account holders or project proponents to request the host Party to apply the corresponding adjustment. 2. If evidence of a corresponding adjustment is still not observed within **two years** of its required application, Verra will withdraw the Article 6 Labels from relevant VCUs on the Verra Registry and inform the affected Account Holders, the Project Proponent, the retirement beneficiary, and the relevant State CORSIA authority. 3. Project Proponents must compensate for, replace, or otherwise reconcile any VCUs retired for CORSIA purposes for which the Article 6 label has been withdrawn, within 6 months of such withdrawal. Evidence that corrective action has been taken must be submitted to the Verra Registry. Eligible forms of compensation, replacement, or reconciliation may include: • Cancellation of VCUs from the project with valid CORSIA and Article 6 labels. • Cancellation of an equivalent number of VCUs with valid CORSIA and Article 6 labels from other projects within 60 business days of receiving formal Verra notification of such required action.

[7] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

Evidence of the corrective actions taken, including updated statuses for the affected VCUs, will be made publicly available on the Verra Registry. Verra will update the status of VCUs to 'cancelled'.

Material Change Submission August 2023

Verra has clarified and expanded the double counting provisions throughout the VCS Program Documents as part of the August 2023 VCS Program update:

- *VCS Standard*, v4.5, Section 3.23: Incorporated requirements from guidance documentation directly into the VCS Standard and added evidence requirements and process for avoiding double issuance of credits across multiple crediting programs. Projects may be registered under both the VCS Program and another GHG program (which may be an approved GHG program such as CDM, JI, and the Climate Action Reserve, or any other GHG program) but their reductions and removals cannot be double counted within or across GHG programs. The term GHG program covers carbon crediting programs, as defined further in the VCS Program Definitions.
- *VCS Standard*, v4.5, Section 3.24: Incorporated requirements from guidance documentation directly into the VCS Standard and added evidence requirements and process for avoiding double claiming, including with emissions trading programs or other binging emission limits, other forms of credit, and scope 3 emissions. VCU labels demonstrate that a unit meets the requirements of other (non-VCS) standards or program, such as requirements under the Article 6 of the Paris Agreement (Article 6) or other international programs such as the CORSIA.
- *VCS Standard*, v4.5, Section 3.25: Elaborated VCU Labels. These VCU labels designate that a particular VCU has met the requirements of another certification or is eligible or approved for use in a national, sectoral, or investor-specific market. A VCU label does not represent ownership of the benefits or outcomes generated by the project to fulfil the requirements of any other standard or criteria. The Verra website lists available VCU labels and the procedure for attaining such labels.
- *Article 6 Label Guidance, v1.0*: Introduced new, dedicated guidance for how VCUs may receive Article 6 Labels to indicate they have been authorized for specific uses by host countries under Article 6 of the Paris Agreement. The implementation of these labels brings the VCS into alignment with how Parties to the Paris Agreement are to account for their climate action. Article 6 Labels are optional under the VCS Program, as not all uses of VCUs require authorization from host Parties, but the labels are necessary for retirement against certain retirement purposes in the Verra Registry (including CORSIA).
- *VCS Program Definitions*, v4.4: Added or updated definitions, as follows:
    - Double Claiming: Any situation in which the same GHG emission reduction or carbon dioxide removal is credited or claimed by more than one entity towards separate mitigation targets or emissions inventories. Double claiming does not include nested claims such as the same reduction or removal being claimed by a business and the jurisdiction(s) in which it operates. Double claiming includes when a GHG emission reduction or carbon dioxide removal is credited under the VCS Program and the same emission reductions and removals or GHG-related benefits are also credited or claimed under an emission trading program, binding emissions limit, or GHG-related environmental credit system. See "Emissions Trading Program", "Binding Emissions Limit", and "GHG-related Environmental Credit System".
    - Double counting: Any situation in which the same GHG emission reduction or carbon dioxide removal is counted, claimed, or credited more than once. Double counting includes double issuance, double use, and double claiming.
    - Double Issuance: Any situation in which the same GHG emission reduction or carbon dioxide removal is credited by two or more projects, or through two or more GHG programs. Double issuance includes when the same GHG emission reduction or carbon dioxide

removal issued as a VCU under the VCS Program is also credited under another GHG program, and such credits have not been cancelled under the other GHG program. See "GHG Program" for further clarification of what constitutes double issuance.

  - Double use: Any situation where a GHG emission reduction or carbon dioxide removal or GHG-related benefit is further sold, transferred, retired, used, or cancelled after having already been retired or used.
  - Binding Emissions Limit: A system that creates binding limits on the total GHG emissions or emissions per unit of output or activity from a site, company, sector, or region but does not include emissions trading.
  - Emissions Trading Program: A voluntary or regulatory program or scheme that allows for trading in GHG credits or allowances. Examples of an emission trading program include cap-and-trade emission trading schemes, such as the Regional Greenhouse Gas Initiative (RGGI) and European Union Emissions Trading System, or baseline-and-credit system such as Canada's Output-Based Pricing System.
  - GHG Program: A formal or organized program, system, or arrangement for the recognition of activities leading to GHG emission reductions or carbon dioxide removals, and/or the crediting or issuance of instruments representing, or acknowledging GHG emission reductions or carbon dioxide removals. Examples of a GHG program include, but are not limited to, any form of GHG crediting mechanism that issues carbon credits or offsets, such as international and independent programs (CDM, JI, ACR, CAR, Gold Standard), or any other carbon crediting mechanisms or offsets systems administered by government agencies, such as the Switzerland CO2 Attestations Crediting Mechanism or Canada federal GHG Offset System.
  - GHG-related Environmental Credit System: A system for the crediting, issuance of instruments, or acknowledging activities that could be interpreted as having GHG emission reduction or carbon dioxide removal value. Examples of a GHG-related environmental credit system include, but are not limited to, energy attribute certificates (EAC); renewable energy certificates (REC); Guarantee of Origin (GO); or renewable thermal certificates (RTC)."

- Consequential changes applied throughout registration and issuance processes and templates:
  - *Registration and Issuance Process*, v4.4, Sections 4.2.15, 4.2.17, 4.2.19
  - VCS Project Description Template, v4.3
  - VCS Monitoring Report Template, v4.3
  - VCS Joint Project Description & Monitoring Report Template, v4.3
  - VCS Validation Report Template, v4.3
  - VCS Verification Report Template, v4.3
  - VCS Joint Validation & Verification Report Template, v4.3

Material Change Submission April 2021

Verra updated the requirements with respect to double counting in the VCS Standard v4.1 Sections 3.19 and 3.20 (these are currently sections 3.20 and 3.21 in the VCS Standard v4.2). Verra added requirements in these sections of the VCS Standard as to clarify that VCUs used in the context of Paris Agreement Article 6 mechanisms and international Paris-related programs such as CORSIA must meet requirements established under such mechanisms and programs, including those relating to double counting and corresponding adjustments. Project proponent must use VCU labels to demonstrate adherence to such requirements (current Section 3.21.1).

In addition, Verra has prepared a revised version of the CORSIA Label Guidance (see Attachment 3. Guidance for CORSIA Labels). This update includes requirements for the Letter of Authorization, which a project must provide in order to demonstrate the country has authorized the units for use in CORSIA and will not double count such units.

Updates are available in the VCS Standard v4.1 Sections 3.19 and 3.20 (these are currently sections 3.20 and 3.21 in the VCS Standard v4.2), the CORSIA Label Guidance (Attachment 3) and in the JNR Requirements v4.0, Scenario 2 Requirements and Scenario 3 Requirements Section 3.7.

The following prior submissions (from our program application form dated 12 June 2020) are modified: 1. In section 4.7, response to point b) (page 59) “Are measures in place to avoid double use, as defined in the corresponding Paragraphs, particularly with respect to registry-related protocols and/or oversight? “ mentions procedures from APX and IHS Markit, which are no longer valid. Verra now manages the registry system directly. This also applies to the response to point c) (page 59) “Are measures in place to avoid double-selling, as defined in the corresponding Paragraphs, particularly with respect to registry-related protocols and/or oversight?” 2. Responses to double counting procedures have been updated: ● The response to the question “Are measures in place (or would the Program be willing and able to put in place measures) to avoid double-claiming as defined in Paragraph 3.7.3? “ on page 60, mentions double counting in the Kyoto context. This section has been updated to clarify how this applies in the post-Kyoto context. ● Further our response stated that Verra is willing to consider new requirements for “ If no measures are currently in place, describe what measures the Program would consider putting in place in relation to the guidelines in Paragraphs 3.7.3 and Paragraphs 3.7.8 – 3.7.9” (page 60). Such updates have been developed. ● In response to “If no measures are currently in place, describe what measures the Program would consider putting in place in relation to the guidelines in Paragraphs 3.7.10 – 3.7.13” (page 61). The proposed host country attestations noted (in the first bullet point on page 62) have been developed.

Q&A with ICAO July 2021

1. How do you foresee aligning and implementing your programme’s systems and procedures consistent with international requirements on avoidance of double counting and claiming, including in particular corresponding adjustments by host countries, as required?

Verra response: Once Article 6 is areed, Verra would analyze outcomes and make adjustments to our current plans as needed. This will likely be an ongoing process as further rules, specifications and norms are established over time under the UNFCCC decisions and market norms. This would follow our standard process of developing program updates as needed, undertaking stakeholder consultations and ultimately updating requirements or registry procedures as needed.

2. Have you approached national governments regarding their provision of host country attestations reflecting how they will apply corresponding adjustments in respect of CORSIA eligible emissions units? If so, are there any measures or procedures in place or under development by the country(ies) to support these country actions under the Paris Agreement?

Verra response: Verra started a Global Dialogue on voluntary markets along with several partners. While the focus is on the VCM, one of the main goals has been discussing and engaging with governments on issues including double counting. There are a broad range of views on the subject across countries. There are several other initiatives aimed at country capacity building under Paris, which is a role that goes far beyond the remit of Verra. Most countries do not yet have these systems in place as Article 6 is not yet agreed. Indeed, countries do not want to get ahead of the Article 6 outcomes and are generally waiting for the outcome before implementing anything. Further, many/most countries are likely to need capacity building support to implement anything on this (support on NDC tracking, registries, institutional arrangements for reviewing/approving activities for exporting mitigation outcomes, etc.). There are several pilots ongoing testing how this infrastructure might work. Verra will analyze and incorporate any key lessons learned from these pilots, as possible.

3. Is there a system or systems in place to track units generated in the country(ies) that may be cancelled for CORSIA offsetting requirements? Does the programme itself have any procedures providing for such tracking by a host country?

Verra response: Verra will be able to track all units that are promised a CA (which will underpin the label) and whether (and when) such adjustments are actually made. When the units are used, the Verra registry can specify that such units have been retired for the purpose of CORSIA use, and by what airline. Verra plans to issue annual reports, which would include information on credits issued that have been authorized by Host Countries for CORSIA and other offsetting purposes and the units correspondingly adjusted, when such information is available.

4. Do host countries have a policy on what and when adjustments should apply in respect of CORSIA eligible units?

Verra response: Our understanding is that countries are planning to treat CORSIA and Article 6 in the same way - e.g., for Article 6, if CAs are only needed for mitigation outcomes inside NDC scope, countries will apply the same logic for CORSIA. On both, therefore, countries will need to await the outcome of Article 6 negotiations. 84 Countries should state in the Letter of Authorization when they will report information on CAs they've promised (most likely this will be contained in the biennial transparency report (BTR)). Countries would then report adjustments made in the subsequent BTR.

5. What do you envisage as a process or procedures pertaining to the timing of applying adjustments?

Verra response: We are not clear on this question - is this about how we imagine countries will apply adjustments? If so, we envisage adjustments will be made/reported via their BTRs – in other words, CAs will be reported every two years. It is possible the negotiation texts will elaborate more on this and require more (or less) frequent reporting. For Verra's part, we will immediately apply a label to projects that have been promised the adjustment (in the Letter of Authorization), and will implement a way of indicating when the actual adjustment has been made. Overall, this is a question for the Article 6 negotiators.

6. According to programme procedures and/or host country policies, at what point will corresponding adjustments be applied by host countries—at the time that units are, e.g., issued, or authorised, or used toward CORSIA?

Verra response: As noted above, this is envisaged as happening in the BTR. BTRs are meant to be submitted every two years. See also above in terms of us labelling when the project has the letter of authorization and when the adjustment is made.

7. What risks have the host country(ies) or programme identified that could arise from different choices of approaches (as examples, risks to, e.g., the host country, airlines, market participants)? How are these risks addressed or could be addressed?

Verra response: The main risk is that the host country doesn't make the promised CA, or the airline needs to use the unit before the adjustment is made. Several options exist to manage this risk: • Insurance products may be available: Vera has been in discussions with several providers who are interested in building a product for this • A buffer pool could potentially be created: while there are pros/cons of this option, a buffer may be feasible for managing CA risk • VCS could label the units only after the host country has issued its BTR: This option would ensure that only units that have already been adjusted would be labelled as CORSIA eligible. This option would be the most restrictive, but would also avoid all risk that such adjustments might not happen. However, in order to take this approach, it would need to be a CORSIA-wide policy, as it would otherwise be race to the bottom if not all programs do this. Verra would also like to express concerns over the seller liability approach, which would also cause a race to the bottom. It is obviously very attractive to buyer airlines for units to have seller liability. However, many project developers that would then be liable are small, community run and only exist in a single country. They would not have the resources, nor the ability in most cases to actually replace their units with ones that have a CA. If they are in a country that hasn't made the promised adjustments, it is unlikely that any other units would be available. It is also unlikely they could afford to replace such units which are almost certainly to be

higher-priced and have limited availability in the market. An unenforceable seller liability approach is an extremely high risk for the integrity of the system. 8. VCS procedures reviewed by TAB seem to reflect the programme's reliance on host countries to apply and report on corresponding adjustments for CORSIA-eligible units in a manner consistent with the EUC and guidelines. a. Does VCS foresee developing more detailed programme procedures pertaining to these country actions and related requirements? Verra response: Verra will build out more detailed requirements when Article 6 negotiations are concluded. b. In the absence of programme procedures pertaining to these country actions, including inter alia for the contents of attestations or expectations for corresponding adjustments and related national reporting, how does VCS foresee assessing the sufficiency and consistency of a country's own measures with the EUC and guidelines? Verra response: Verra submitted the full contents of the Letter of Authorization. Once Article 6 is agreed, Verra will build out the documentation further if needed. Article 6 should specify sufficient country measures for meeting the EUCs. Reporting any CAs made in the BTR should satisfy the EUC and provide workable means for Verra to identify and report on all units used for CORSIA purposes and the status of the adjustments made. If however, Article 6 does not get agreed, or does not specify when such adjustments should be reported, Verra may be able to implement other ways of reporting on such adjustments VCS material changes for CORSIA First Phase eligibility conditions, August 31st, 2023 from countries, based on an ad-hoc assessment of their procedures. This question will be revisited after the Glasgow COP.
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The documents mentioned in (c) are the most up-to-date version of these VCS program documents.. They include the specific statement as set out in (a) in relation to updated procedures necessary to prevent double-claiming. Verra is committed to continually updating its program documents as necessary.

CHANGE 4: New methodology for REDD+
a. Description of the change (e.g., the addition, modification, deletion undertaken):

To drive improvements in accounting of project activities, Verra has published a new methodology, *VM0048 Reducing Emissions from Deforestation and Forest Degradation, v1.0*. Verra has also published module *VMD0055 Estimation of Emission Reductions from Avoiding Unplanned Deforestation, v1.0*. This methodology replaces other REDD methodologies, starting with those that account for Avoided Unplanned Deforestation (AUD).

VM0048 projects may be developed as standalone activities or may be nested in a JNR program (or other program such as FCPF or ART Trees). Verra proposes two options for VM0048 to be accepted within CORSIA:

1) For any project activity (standalone or nested, noting that this methodology uses a jurisdictionally-derived baseline approach that significantly improves project integrity, as described below); or,

2) Where projects are nested in any CORSIA-approved REDD+ Program (e.g., ART, FCPF, JNR scenarios 2a and 3). If this concept is accepted by CORSIA, Verra will draft appropriate guidance in the CORSIA Label Guidance to ensure that only such units are labeled.

Verra would greatly appreciate an opportunity for dialogue with the TAB to explore the merits of these different options and seek to understand the TAB's perspective.

VM0048 strengthens the robustness of accounting, in particular as related to the following EUC:

2. *Eligibility Criterion: Carbon offset credits must be based on a realistic and credible baseline. Offset credits should be issued against a realistic, defensible, and conservative baseline estimation of emissions. The baseline is the level of emissions that would have occurred assuming a conservative "business as usual" emissions trajectory i.e., emissions without the emissions reduction activity or offset project. Baselines and underlying assumptions must be publicly disclosed.*

As noted above, VM0048 completely changes the approach to setting project baselines. Instead of setting these 'bottom up', by the project proponent, Verra will allocate risk-adjusted jurisdictional activity data. This ensures that projects are based on a realistic and credible 'business as usual' scenario that reflects deforestation dynamics across the entire jurisdiction, and is aligned with national accounting.

5. *Eligibility Criterion: Permanence – Carbon offset credits must represent emissions reductions, avoidance, or carbon sequestration that are permanent. If there is risk of reductions or removals being reversed, then either (a) such credits are not eligible or (b) mitigation measures are in place to monitor, mitigate, and compensate any material incidence of non-permanence.*

VM0048 uses the same permanence approach as all other VCS AFOLU projects, and all other material changes submitted with respect to permanence also apply to VM0048.

6. *Eligibility Criterion: A system must have measures in place to assess and mitigate incidences of material leakage. Offset credits should be generated from projects that do not cause emissions to materially increase elsewhere (this concept is also known as leakage). Offset credit programs should have an established process for assessing and mitigating leakage of emissions that may result from the implementation of an offset project or program.*

VM0048 includes provisions to estimate emissions from different leakage sources including: 1) Activity-shifting leakage; 2) Market-effect leakage; and 3) Emissions from leakage prevention activities. In addition, where VM0048 projects are nested within JNR, ART, FCPF or other jurisdictional REDD programs, jurisdictional monitoring and accounting also provides additional assurance that any leakage not captured at the project level is captured in jurisdictional accounting.

7. *Eligibility Criterion: 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 ICAO document — CORSIA Emissions Unit Eligibility Criteria - 4 - 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.*

VM0048 meets all of these double counting provisions in the same way as the rest of the VCS program, and all prior and current material changes submitted are relevant to VM0048. In addition, in a nested context, VM0048 ensures no double counting between jurisdictional and project accounting in two ways:

1) VM0048, in particular VMD0055, accounts for activities by estimating jurisdiction-wide activity data and allocating it to project areas based on deforestation risk across the jurisdiction. This ensures projects are aligned with national accounting and receive an appropriate "share" of activity data.

2) When nested in JNR, ART, FCPF or other approved programs, each program includes specific rules to ensure any credits issued to activities within the jurisdiction are not double counted, for example:

* *JNR Requirements*, v.40, Section 3.7.2 "Jurisdictional proponents shall not seek credit for GHG emission reductions credited to lower-level activities. They shall deduct from their net GHG benefit (i.e., the total change in GHG emissions with respect to the registered FREL minus leakage) any GHG emission reductions achieved or anticipated during the same period by all projects and lower-level jurisdictional programs that encompass the same jurisdictional boundary (i.e., covering the same or overlapping area(s), carbon pools and GHG sources) as set out in Section 3.18.6."

* ART- Trees v1.0, Section 13.1: "To mitigate the risk of double issuance, TREES requires the disclosure of any issued emission reductions in the same accounting area, including credits from projects, which will be deducted from TREES issuance volume, checks of duplicate registration under other programs (including offset programs) and requirements for disclosure of other registrations, as well as for cancellation of the units on one registry prior to re-issuance on another."

* FCPF Methodological Framework Section 6.2, "An ER transaction registry shall ensure that each ER is appropriately issued, serialized, transferred, retired, and/or canceled; provide clear linkages to other information included in an ER Programs and Projects Data Management System; and ensure that ERs are not issued, counted, or claimed by more than one entity."

b. Rationale for the change:

The early approaches to baseline setting at the project level were based on "reference regions"—forest areas that share a range of characteristics with the project area, such as the presence of drivers of deforestation, distance to transportation networks, ecology, and policy regimes. These approaches were developed by the world's leading forest carbon experts and academics. They underwent extensive public consultation and review by auditors and were consistent with prevailing science at the time. These approaches were based on the idea that patterns in deforestation seen in the historical period in the reference area would provide a representative baseline land use scenario for the project area. However, in watching project proponents apply, and validation/verification bodies audit, the use of these methodologies, Verra noted that:

• Reference regions can be difficult to match appropriately, especially for long periods over the life of a project. Various methodologies also included different provisions for setting reference areas. • As governments developed national and subnational approaches, there could be discrepancies in estimates of climate impact due to different methodological approaches. As a first step, VMD0055, the module within VM0048 for Unplanned Deforestation, requires the development of activity data (i.e., the average number of hectares expected to be deforested over the subsequent six years) across an entire jurisdiction in alignment with jurisdictional approaches to REDD+. The VMD0055 approach assumes that the average historical rate of deforestation within the jurisdiction over the previous 10 years will continue over the subsequent six years, with no allowance for upward or downward trends. Predicted deforestation activity data is then spatially allocated throughout the jurisdiction based on the relative risk of deforestation in each pixel, determined largely by the distance to the edge of the forest and localized deforestation rates within subnational administrative units. More complex risk mapping models may also be used where they are demonstrably more accurate. This top-down allocation approach will assist in consistent baseline setting across the jurisdiction and between Verra AUD projects, and will reduce the potential for any perceived or actual conflicts of interest at the project proponent level. The allocation approach also improves accuracy and conservativeness at the national and global level. Furthermore, the approach is consistent with UNFCCC national-level accounting for REDD+ and Nationally Determined Contributions under the Paris Agreement by aiming to harmonize accounting across scales. This new approach is further enhanced through centralized activity data collection and the mapping of deforestation risk using globally consistent accuracy standards. Technological improvements—particularly in remote sensing—that have occurred since the original REDD methodologies were released have made it feasible for Verra, using contracted data service providers, to take the innovative approach of allocating activity data to project proponents for their use. While Verra encourages governments and other carbon market stakeholders to submit high-quality datasets to support this effort, the development of the activity data and risk maps and the allocation of activity data will be completed by third parties. Verra and independent experts will provide final approval of the data. This improved approach will ensure robust project accounting that can be nested in any jurisdictional program.
c. Where the change is reflected in the Programme's documentation or other resource(s)[8]:
The methodology is available at https://verra.org/methodologies/vm0048-reducing-emissions-from-deforestation-and-forest-degradation-v1-0/
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
Verra's 2021 Pilot Phase Application (Page 10-13) Jurisdictional and Nested REDD+

[8] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

We would like to highlight that one of the primary innovations of the VCS Program is the Jurisdictional and Nested REDD+ (JNR) framework, which supports the design, implementation, and integration of REDD+ programs and projects that enhance and protect forests at national and sub-national levels. JNR aligns with the UNFCCC Warsaw REDD+ Framework and aims to go beyond that to meet the needs of emerging demand and finance through opportunities such as the CORSIA, Internationally Transferred Mitigation Outcomes (ITMOs) and domestic markets. One of the defining features of JNR is the pathway it provides for projects to "nest" within national and sub-national accounting frameworks, bringing much-needed private finance and know-how to address deforestation and forest degradation at scale, while supporting national strategies. JNR provides requirements for REDD+ jurisdictional programs and nested projects, and includes Reduced Emissions from Deforestation and Forest Degradation (REDD), Improved Forest Management (IFM) and Afforestation, Reforestation and Revegetation (ARR) activities.

Specifically, the JNR Requirements include rules for jurisdictional boundaries, crediting periods, eligible activities, GHG sources and carbon pools, baseline determination, leakage calculations, permanence, GHG emission reductions and removals calculations, uncertainty estimations, ownership, safeguards and approvals. It is intended to assist governments, private entities, civil society organizations, local stakeholders and validation/verification bodies (VVBs) in developing and auditing market-ready jurisdictional programs and nested projects.

The development of the JNR Requirements was overseen by an advisory committee and technical expert groups, comprising representatives from national and sub-national governments, leading experts in REDD+ and representatives from NGOs and the private sector. The JNR Requirements also went through extensive public consultation.

In addition to the requirements set out in JNR, jurisdictional programs and nested REDD+ projects are required to follow all applicable VCS requirements and rules set out in VCS Program documents, such as the VCS Standard and AFOLU Requirements. Note that nested REDD+ projects should follow their applied VCS methodology, except where rules in the JNR Requirements take precedence, for example, in the application of jurisdictional data, parameters and methods to project baseline setting and monitoring. VCS Program requirements stated in the document below (i.e., the Emissions Unit Program Application Form) apply across all activities credited under the Program, including JNR programs and nested REDD+ projects, mutatis mutandis, unless otherwise stated.

Both jurisdictional REDD+ programs and nested REDD+ projects (i.e., REDD, IFM or ARR) that meet the definitions laid out below are included in this application because these activities address the risk of material leakage. In other words, any decrease in carbon stocks or increase in GHG emissions as a result of leakage outside project areas (but within the larger jurisdiction) would be monitored, reported, verified and accounted for by projects and as part of a jurisdictional program with national or sub-national implementation. Either of these REDD+ pathways under the VCS Program would fully meet CORSIA's EUC and similar high-quality criteria for other market-based mechanisms. Specifically, project activities that are typically included in a jurisdictional Forest Reference Emission Level (FREL) (i.e., REDD and IFM) are only included for consideration in this application where they meet the definition of a "nested REDD+ project" below.

For the purpose of this application, JNR programs and nested REDD+ projects are defined as follows:

- JNR program: A national or sub-national jurisdictional government program that applies VCS JNR to enable accounting and crediting of its REDD+ (i.e., REDD, IFM and/or ARR) policies and measures, implemented as GHG mitigation activities. A JNR program may or may not include nested REDD+ projects at the discretion of the jurisdiction.

- Nested REDD+ project: A VCS REDD+ (i.e., REDD, IFM orARR) project located within any jurisdictional REDD+ program (i.e., the program does not have to be a VCS JNR registered program), where the project:
  - Is part of a nationally implemented (or, as an interim measure, sub-nationally implemented) jurisdictional REDD+ program with a third-party assessed (e.g., by FCPF Technical Advisory Panel (TAP), UNFCCC Roster of Experts, and/or VCS VVB with JNR expert panel) jurisdictional baseline (or reference level). Such baselines should recognize and incorporate relevant project activities, and include sufficiently robust data for use by projects for nesting.
  - Has adequately aligned its baseline and monitoring approach with those of the jurisdiction, such that project-level baselines in aggregate cannot exceed, and represent a justifiable share of, the national (or sub-national) baseline under which projects are nested.
  - Meets any leakage or other requirements set out by the jurisdiction (e.g., such as those relating to safeguards, reversals and/or underperformance), and is located within a jurisdiction-wide GHG monitoring system, so that any project leakage is accounted for within the jurisdiction and therefore the EUC leakage criterion is met.
  - Has undertaken a full and transparent uncertainty assessment (including an uncertainty deduction, where relevant) for all relevant data, parameters and methods following IPCC guidelines and the VCS Standard.
  - Has secured any required approvals from the appropriate government entity, including, at a minimum, a commitment to ensure that any potential double counting with any relevant NDC is addressed (e.g., via a corresponding adjustment).

The VCS Program and the complementary JNR framework offer jurisdictional REDD+ programs and nested REDD+ projects the opportunity to generate market-quality, tradable GHG emission reductions and removals. In particular, the VCS Program and the JNR framework meet CORSIA's EUC through a variety of requirements and program elements, including:

- Development of credible and conservative jurisdictional and project baselines that result in high-quality credits,
- The ability to issue, retire, trade and track unique units through a transparent and robust registry platform,
- Leakage prevention, monitoring and deduction requirements
- Risk assessment, mitigation and monitoring provisions and reversal liability requirements to address non-permanence through use of risk tools and pooled buffer accounts,
- Robust third-party validation and verification,
- Clear rules to avoid double counting and double claiming, and
- Alignment with UNFCCC REDD+ environmental and social safeguard requirements.

Given developments relating to project nesting in both JNR and non-JNR jurisdictional REDD+ programs, as well as the advancement of jurisdictional REDD+ programs generally, Verra is working with a group of experts to update the VCS Program rules. Such updates will facilitate REDD+ project nesting in both JNR and non-JNR jurisdictional REDD+ programs and will cover a variety of nesting issues, including but not limited to, baseline alignment, government approvals, monitoring, leakage, uncertainty estimations and addressing potential performance differences across scales. While existing VCS rules and requirements ensure JNR programs and nested REDD+ projects (as defined above) fully meet CORSIA's EUC, these updates will improve clarity on REDD+ nesting procedures and make it easier for jurisdictions and projects to understand how to ensure their eligibility for international compliance trading. In the interim, Verra has published a high-level guidance document for VCS REDD+ projects, which provides additional guidance on nesting into existing and emerging national (or sub-national) REDD+ programs. Relevant updates to the JNR Requirements and AFOLU Requirements, and more detailed guidance for both governments and projects, are anticipated to be released for public consultation in late 2019 and published in early 2020. Verra will also establish procedures by which REDD+ projects can be clearly designated as nested (e.g., including meeting international compliance requirements, such as for use under CORSIA) in the Verra Project Database.

AFOLU Stand-Alone Projects
Some AFOLU project-level activities do not pose a risk of material leakage, which can be demonstrated using VCS methodologies and tools (see Section 4.6.2 of the AFOLU Requirements). Accordingly, AFOLU project activities that are typically not included in a jurisdiction's Forest Reference Emission Level (FREL) (i.e., ARR, WRC, ALM, and ACoGS) are submitted for consideration in this application as stand-alone projects (i.e., non-nested projects operating outside of or apart from any jurisdictional REDD+ program) where they are able to demonstrate no material leakage risk. For example, stand-alone forest restoration projects on degraded land do not pose a risk of leakage because they are not displacing any emission-causing activities.

For the purpose of this application, ARR projects are considered nested where they meet the definition of a "nested REDD+ project" laid out in Section 2 above. Where ARR projects do not meet such definition, and where they can demonstrate no material risk of leakage, these projects are considered 'stand-alone'.

Table 1 below summarizes the activities that are being proposed as part of this application, as reflected above and in Appendix B.

Level of Implementation	**Activity Type**					
	REDD	**IFM**	**ARR**	**WRC**	**ALM**	**ACoGS**
Jurisdictional	Yes	Yes	Yes	No	No	No
Nested REDD+ projects and programs of activities	Yes	Yes	Yes	No	No	No
Stand-alone projects and programs of activities	No	No	Yes*	Yes*	Yes*	Yes*

*These project activities are only included as stand-alone projects where they are able to demonstrate no material leakage risk.

The Verra Project Database can readily identify project types and as such, Verra can clearly exclude any project types that are deemed to not meet the EUC.

In **Verra's 2022 reassessment application** – changes to JNR were made throughout the application.

e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:

The methodology is available at https://verra.org/methodologies/vm0048-reducing-emissions-from-deforestation-and-forest-degradation-v1-0/.

Any further material updates or changes to VCS VM0048 will be communicated in the subsequent Material Change form.

CHANGE 5: New Methodology for Afforestation, Reforestation and Revegetation
a. Description of the change (e.g., the addition, modification, deletion undertaken):

Verra has published a new VCS methodology *VM0047 Afforestation, Reforestation and Revegetation, v1.0.*

Verra understands the TAB may be concerned that projects using methodologies such as VM0047 may occur in countries with REDD+ activities but without the projects being nested into a jurisdictional REDD+ program. In such circumstances, detecting cases of overlapping registration and double issuance of VCUs may be challenging, as may be leakage. With such concerns in mind, Verra sees three potential options for VM0047 approval:

1) **Option 1:** Approve VM0047 for application in any location. This methodology takes a standardized baseline approach that significantly improves project integrity, as described below.

2) **Option 2:** Approve VM0047 as a single methodology, with VCS CORSIA Label Guidance applying the two scenarios identified in Option 3 (i.e., Verra would not create alternative versions of the methodology, but would only grant the label in (a) in a non-REDD+ country and/or (b) nested scenarios.

3) **Option 3:** Approve VM0047 for application differently, based on whether it is applied in a REDD+ Country or not. For example, Verra could create two versions of the methodology as follows:

    a. VM0047a —Verra would publish a new version of VM0047 that includes an applicability condition restricting its use to non-REDD+ countries.

    b. VM0047b —Where applied within REDD+ countries, VM0047b could be accepted by CORSIA where projects are nested in JNR, ART, FCPF or other CORSIA-approved jurisdictional programs.

Verra's preference among these options is option 2, as we are able to identify projects fitting the two scenarios and label them accordingly without needing to create parallel versions of the methodology as is done in option 3. Such parallel meth versions are considerably more difficult for us to manage, maintain and further develop over time. They can also create market confusion and do not otherwise add any value.

We note there are already precedents and experience in which labels are applied on the basis of specific project characteristics rather than specific meth. The VCS scope of eligibility already has labelling according to project size and sustainable development reporting. Labelling for JNR credits is based on scenarios and the recipients of credits. CORSIA's approach to the enforcement of government policy for the first phase will also require project-by-project distinctions to be followed in labelling. This is also not unique to CORSIA, as it is expected that project characteristics will need to be followed under the ICVCM category-level (methodology) approvals.

Verra would greatly appreciate an opportunity for dialogue with the TAB to explore the merits of these different options and seek to understand the TAB's perspective.

Should option 2 be followed, Verra would prepare appropriate guidance in the CORSIA Label Guidance to ensure that only appropriate credits are labeled.

VM0047 strengthens the robustness of accounting, in particular as related to the following EUC:

2. Eligibility Criterion: Carbon offset credits must be based on a realistic and credible baseline. Offset credits should be issued against a realistic, defensible, and conservative baseline estimation of emissions. The baseline is the level of emissions that would have occurred assuming a conservative "business as usual" emissions trajectory i.e., emissions without the emissions reduction activity or offset project. Baselines and underlying assumptions must be publicly disclosed.

As noted above, VM0047 completely changes the approach to setting project baselines. A dynamic performance benchmark improves upon a static, forecasted baseline by adjusting to real-time environmental conditions and specific project factors, rather than relying on predictions established at the project's start. This adaptability ensures that the baseline more accurately represents a real-time counterfactual scenario, avoiding reliance on potentially outdated or inaccurate forecasts. This method provides a matched, real-time baseline against which the project impacts on carbon stocks can be measured.

5. Eligibility Criterion: Permanence – Carbon offset credits must represent emissions reductions, avoidance, or carbon sequestration that are permanent. If there is risk of reductions or removals being reversed, then either (a) such credits are not eligible or (b) mitigation measures are in place to monitor, mitigate, and compensate any material incidence of non-permanence.

VM0047 uses the same permanence approach as all other VCS AFOLU projects, and all other material changes submitted with respect to permanence also apply to VM0047.

6. Eligibility Criterion: A system must have measures in place to assess and mitigate incidences of material leakage. Offset credits should be generated from projects that do not cause emissions to materially increase elsewhere (this concept is also known as leakage). Offset credit programs should have an established process for assessing and mitigating leakage of emissions that may result from the implementation of an offset project or program.

Leakage module VMD0054 for ARR methodology VM0047, incl includes provisions to estimate emissions from different leakage sources, including 1) Activity-shifting leakage, 2) Market-effect leakage,) Emissions from leakage prevention activities. In addition, where VM0047 projects are nested within JNR, ART, FCPF, or other jurisdictional REDD programs, jurisdictional monitoring and accounting also provide additional assurance that any leakage not captured at the project level is captured in jurisdictional accounting.

7. Eligibility Criterion: 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 ICAO document — CORSIA Emissions Unit Eligibility Criteria - 4 - 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.

VM0047 meets all of these double counting provisions in the same way as the rest of the VCS program, and all prior and current material changes submitted are relevant to VM0047. In addition, in a nested context, VM0047 ensures no double counting between jurisdictional and project accounting in two ways:

1) VM0047 assesses additionality through a dynamic performance benchmark. This ensures projects are truly additional and are adding carbon stock beyond business as usual and beyond any

legal requirements. The methodology requires matching project areas to remotely sensed control plots that have the same geographic, environmental, and policy contexts to control for, and prevent projects from double counting. 2) When nested in JNR, ART, FCPF or other approved programs, each program includes specific rules to ensure any credits issued to activities within the jurisdiction are not double counted, for example: * *JNR Requirements*, v.40, Section 3.7.2 "Jurisdictional proponents shall not seek credit for GHG emission reductions credited to lower-level activities. They shall deduct from their net GHG benefit (i.e., the total change in GHG emissions with respect to the registered FREL minus leakage) any GHG emission reductions achieved or anticipated during the same period by all projects and lower-level jurisdictional programs that encompass the same jurisdictional boundary (i.e., covering the same or overlapping area(s), carbon pools and GHG sources) as set out in Section 3.18.6." * ART- Trees v1.0, Section 13.1: "To mitigate the risk of double issuance, TREES requires the disclosure of any issued emission reductions in the same accounting area, including credits from projects, which will be deducted from TREES issuance volume, checks of duplicate registration under other programs (including offset programs) and requirements for disclosure of other registrations, as well as for cancellation of the units on one registry prior to re-issuance on another." * FCPF Methodological Framework Section 6.2, "An ER transaction registry shall ensure that each ER is appropriately issued, serialized, transferred, retired, and/or cancelled; provide clear linkages to other information included in an ER Programs and Projects Data Management System; and ensure that ERs are not issued, counted, or claimed by more than one entity."
b. Rationale for the change:
Verra's ARR methodology improves upon previous Clean Development Mechanism (CDM) AR approaches by using a dynamic performance benchmark instead of static baselines, which better reflects the BAU, without project scenario. For large-scale projects, VM0047 employs a dynamic baseline that adjusts based on observations of matched control areas through remote sensing. This ensures that additionality and baseline adjustments are updated at every verification and represent a real-time, matched counter factual baseline. For smaller-scale projects, VM0047 supports a census-based approach where no land-use change occurs due to project activities. Projects must meet stringent criteria and complete a thorough census of all planting units, individually marked and recorded. This method allows for sampling of the census for extrapolation of biomass growth at the level of individual planting units, rather than across the entire project area, ensuring conservative estimations of changes in carbon stocks. Where applied outside of REDD+ countries, VM0047a should be considered similar to other approved methodologies such as VM0012, VM0017, VM0021, VM0022, VM0024, VM0026 (and VMD0040), VM0032, VM0033, VM0036, VM0041, and VM0042. Where applied within approved REDD+ programs, VM0047b ensures robust baseline setting that should ensure ARR activities are strongly additional compared to business as usual, are well aligned with national programs and can be effectively nested.
c. Where the change is reflected in the Programme's documentation or other resource(s)[4]:
The methodology is available at https://verra.org/methodologies/vm0047-afforestation-reforestation-and-revegetation-v1-0/
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response

to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
See the information in Change 1, Section d, above.
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The methodology is available at https://verra.org/methodologies/vm0047-afforestation-reforestation-and-revegetation-v1-0/ Any further material updates or changes to VCS VM0047 will be communicated in the subsequent Material Change form.

CHANGE 6: New Methodology for Improved Forest Management
a. Description of the change (e.g., the addition, modification, deletion undertaken):
Verra has published a new VCS methodology, *VM0045 Methodology for Improved Forest Management Using Dynamic Matched Baselines from National Forest Inventories, v1.1.* VM0045 is currently only applicable in the United States (given that the only performance benchmark defined is for the United States). In the future, it will be expanded for global application. Similarly with Change 5 concerning VM0047 (Afforestation, Reforestation and Revegetation), Verra understands the TAB may be concerned that projects using methodologies such as VM0045 may occur in countries with REDD+ activities but without the projects being nested into a jurisdictional REDD+ program. Again, Verra sees three potential options for VM0045 approval: 1) **Option 1:** Approve VM0045 for application in any location. This methodology takes a standardized baseline approach that significantly improves project integrity, as described below. 2) **Option 2:** Approve VM0045 as a single methodology, with VCS CORSIA Label Guidance applying the two scenarios identified in Option 3 (i.e., Verra would not create alternative versions of the methodology, but would only grant the label in cases (a) and/or (b) described for option 3. 3) **Option 3:** Approve VM0045 for application differently, based on whether it is applied in a REDD+ Country or not. For example, Verra could create two versions of the methodology as follows: a. VM0045a —Verra would publish a new version of VM0045 that includes an applicability condition restricting its use to non-REDD+ countries. b. VM0045b —Where applied within REDD+ countries, VM0045b could be accepted by CORSIA where projects are nested in JNR, ART, FCPF or other CORSIA-approved jurisdictional programs. As with Change 5, Verra's preference among these options is option 2, as we are able to identify projects fitting the two scenarios and label them accordingly without needing to create parallel versions of the methodology. Such parallel meth versions are considerably more difficult for us to manage, maintain and further develop over time. They can also create market confusion and do not otherwise add any value. We note again that there are already precedents and experience in which labels are applied on the basis of specific project characteristics rather than specific meth. The VCS scope of eligibility already

has labelling according to project size and sustainable development reporting. Labelling for JNR credits is based on scenarios and the recipients of credits. CORSIA's approach to the enforcement of government policy for the first phase will also require project-by-project distinctions to be followed in labelling. This is also not unique to CORSIA, as it is expected that project characteristics will need to be followed under the ICVCM category-level (methodology) approvals.

Verra would greatly appreciate an opportunity for dialogue with the TAB to explore the merits of these different options and seek to understand the TAB's perspective.

Should option 2 be followed, Verra would prepare appropriate guidance in the CORSIA Label Guidance to ensure that only appropriate credits are labeled.

VM0045 strengthens the robustness of accounting, in particular as related to the following EUC:

2. Eligibility Criterion: Carbon offset credits must be based on a realistic and credible baseline. Offset credits should be issued against a realistic, defensible, and conservative baseline estimation of emissions. The baseline is the level of emissions that would have occurred assuming a conservative "business as usual" emissions trajectory i.e., emissions without the emissions reduction activity or offset project. Baselines and underlying assumptions must be publicly disclosed.

VM0045 uses a dynamic performance benchmark to establish a crediting baseline and assess additionality. This approach compares project performance to a matched, real-time counterfactual scenario, avoiding reliance on potentially outdated or inaccurate forecasts.

5. Eligibility Criterion: Permanence – Carbon offset credits must represent emissions reductions, avoidance, or carbon sequestration that are permanent. If there is risk of reductions or removals being reversed, then either (a) such credits are not eligible or (b) mitigation measures are in place to monitor, mitigate, and compensate any material incidence of non-permanence.

VM0045 uses the same permanence approach as all other VCS AFOLU projects, and all other material changes submitted with respect to permanence also apply to VM0045.

6. Eligibility Criterion: A system must have measures in place to assess and mitigate incidences of material leakage. Offset credits should be generated from projects that do not cause emissions to materially increase elsewhere (this concept is also known as leakage). Offset credit programs should have an established process for assessing and mitigating leakage of emissions that may result from the implementation of an offset project or program.

VM0045 includes provisions to estimate emissions from different leakage sources including: 1) Activity-shifting leakage, and 2) Market-effect leakage. In addition, where VM0045 projects are nested within JNR, ART, FCPF or other jurisdictional REDD programs, jurisdictional monitoring and accounting also provides additional assurance that any leakage not captured at the project level is captured in jurisdictional accounting.

7. Eligibility Criterion: 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 ICAO document — CORSIA Emissions Unit Eligibility Criteria - 4 - 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.

VM0045 meets all of these double counting provisions in the same way as the rest of the VCS program, and all prior and current material changes submitted are relevant to VM0045. In addition,

in a nested context, VM0045 ensures no double counting between jurisdictional and project accounting in two ways: 1) VM0045 assesses additionality through a dynamic performance benchmark. This ensures projects are truly additional and are adding carbon stock beyond business as usual and beyond any legal requirements. The methodology requires matching project to remotely sensed control plots that have the same geographic, environmental, and policy contexts to control for, and prevent projects from double counting. 2) When nested in JNR, ART, FCPF or other approved programs, each program includes specific rules to ensure any credits issued to activities within the jurisdiction are not double counted, for example: * *JNR Requirements*, v.40, Section 3.7.2 "Jurisdictional proponents shall not seek credit for GHG emission reductions credited to lower-level activities. They shall deduct from their net GHG benefit (i.e., the total change in GHG emissions with respect to the registered FREL minus leakage) any GHG emission reductions achieved or anticipated during the same period by all projects and lower-level jurisdictional programs that encompass the same jurisdictional boundary (i.e., covering the same or overlapping area(s), carbon pools and GHG sources) as set out in Section 3.18.6." * ART- Trees v1.0, Section 13.1: "To mitigate the risk of double issuance, TREES requires the disclosure of any issued emission reductions in the same accounting area, including credits from projects, which will be deducted from TREES issuance volume, checks of duplicate registration under other programs (including offset programs) and requirements for disclosure of other registrations, as well as for cancellation of the units on one registry prior to re-issuance on another." * FCPF Methodological Framework Section 6.2, "An ER transaction registry shall ensure that each ER is appropriately issued, serialized, transferred, retired, and/or cancelled; provide clear linkages to other information included in an ER Programs and Projects Data Management System; and ensure that ERs are not issued, counted, or claimed by more than one entity."
b. Rationale for the change:
Verra's new IFM methodology improves upon previous approaches by using a dynamic performance benchmark instead of static baselines, which better reflects the BAU, without project scenario. Eligible projects must adopt at least one new Improved Forest Management (IFM) practice and may combine multiple practices in the same area. The methodology utilizes a comprehensive monitoring and accounting framework to capture the GHG impacts of IFM practices aimed at either avoiding emissions or enhancing sequestration. Where applied outside of REDD+ countries, VM0045a should be considered similar to other approved methodologies such as VM0012, VM0017, VM0021, VM0022, VM0024, VM0026 (and VMD0040), VM0032, VM0033, VM0036, VM0041, and VM0042. Where applied within approved REDD+ programs, VM0045b ensures robust baseline setting that should ensure new IFM activities are strongly additional compared to business as usual, are well aligned with national programs and can be effectively nested.
c. Where the change is reflected in the Programme's documentation or other resource(s)[4]:
The methodology is available at https://verra.org/methodologies/methodology-for-improved-forest-management/
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:

See the information in Change 4, Section d, above. **Material Change Submission 2023** Verra would like to propose that the following methodologies belonging to sectoral scope 14 be considered by the TAB and the Council for inclusion in the VCS's scope of eligibility • Methodology for Improved Forest Management Using Dynamic Matched Baselines from National Forest Inventories, VM0045, v1.0
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The methodology is available at https://verra.org/methodologies/methodology-for-improved-forest-management/ Any further material updates or changes to VCS VM0045 will be communicated in the subsequent Material Change form.

CHANGE 7: Revisions and Inactivations of Methodologies
a. Description of the change (e.g., the addition, modification, deletion undertaken):

Verra has approved the following revisions to CDM methodologies:

Methodology Name	Unique Methodology / Protocol Identifier	Sectoral Scope
VMR0007 Revision to AMS-III.AJ.: Recovery and Recycling of Materials from Solid Wastes	VMR0007, v1.0	Scope 13
VMR0008 Revision to AMS-III.BA.: Recovery and Recycling of Materials from E-waste	VMR0008, v1.0	Scope 13
VMR0009 Revision to AM0057: Avoided Emissions from Biomass Wastes through Use as Feedstock in Pulp and Paper, Cardboard, Fiberboard or Bio-oil Production	VMD0009, v1.0	Scope 4 & Scope 13
AM0073: GHG Emission Reductions Through Multi-site Manure Collection and Treatment in a Central Plan	AM0073 See C&C AM0073 (15Jan24)	Scope 13 & 15
AMS-II.S: Energy efficiency in motor systems	AMS-II.S. See Clarification	Scope 1

Verra has approved the following REVISED VCS methodologies:

Methodology Name	Unique Methodology / Protocol Identifier	Sectoral Scope
VM0033 Methodology for Tidal Wetland and Seagrass Restoration	VM0033, v2.1	Scope 14
VM0007 REDD+ Methodology Framework (REDD+MF), including the following modules: • VMD0001 Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB) • VMD0002 Estimation of carbon stocks in the dead-wood pool (CP-D)	VM0007, v1.7 VMD0001, v1.2 VMD0002, v1.1 VMD0003, v1.1 VMD0004, v1.1 VMD0005, v1.1 VMD0006, v1.4	Scope 14

• VMD0003 Estimation of carbon stocks in the litter pool (CP-L) • VMD0004 Estimation of stocks in the soil organic carbon pool (CP-S) • VMD0005 Estimation of carbon stocks in the long-term wood products pool (CP-W) • VMD0006 Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation/forest degradation and planned wetland degradation (BL-PL) • VMD0011 Estimation of emissions from market-effects (LK-ME) • VMD0013 Estimation of greenhouse gas emissions from biomass and peat burning (E–BPB) • VMD0014 Estimation of emissions from fossil fuel combustion (E-FFC) • VMD0015 Methods for monitoring of greenhouse gas emissions and removals (M-REDD) • VMD0016 Methods for stratification of the project area (X-STR) • VMD0051 Methods for Monitoring of Carbon Stock Changes and Greenhouse Gas Emissions and Removals in Tidal Wetland Restoration and Conservation Project Activities (M-TW)	VMD0011, v1.2 VMD0013, v1.3 VMD0014, v1.1 VMD0015, v2.3 VMD0016, v1.3 VMD0051, v1.1	
VM0015 Methodology for Avoided Unplanned Deforestation	VM0015, v1.2	Scope 14
VM0038 Methodology for Electric Vehicle Charging Systems	VM0038, v1.0 See Corrections	Scope 1 & 7
VM0042 Methodology for Improved Agricultural Land Management (issued corrections and clarifications)	VM0042, v2.0 See Correction and Clarifications	Scope 14
VM0043 Methodology for CO2 Utilization in Concrete Production	VM0043, v1.0 See Correction	Scope 4 & 6
VT0007, Unplanned Deforestation Allocation (UDef-A)	VT0007, v1.0	Scope 14

Verra has inactivated the following VCS methodologies:

Methodology Name	**Unique Methodology / Protocol Identifier**	**Sectoral Scope**
VM0002 New Cogeneration Facilities Supplying Less Carbon Intensive Electricity to Grid and/or Hot Water to One or More Grid Customers	VM0002	Scope 1
VM0004 Methodology for Avoided Planned Land Use Conversion in Peat Swamp Forests	VM0004	Scope 14
VM0009 Methodology for Avoided Ecosystem Conversion	VM0009	Scope 14
VM0013 Calculating Emission Reductions from Jet Engine Washing	VM0013	Scope 3
VM0020 Transport Energy Efficiency from Lightweight Pallets	VM0020	Scope 3 & 7
VM0023 Reduction of GHG Emissions in Propylene Oxide Production	VM0023	Scope 5
VM0024 Methodology for Coastal Wetland Creation	VM0024	Scope 14

VM0027 Methodology for Rewetting Drained Tropical Peatlands	VM0027	Scope 14
VM0029 Methodology for Avoided Forest Degradation through Fire Management	VM0029	Scope 14
VM0030 Methodology for Pavement Application using Sulphur Substitute	VM0030	Scope 4 & 7
VM0031 Methodology for Precast Concrete Production using Sulphur Substitute	VM0031	Scope 6
VM0037 Methodology for Implementation of REDD+ Activities in Landscapes Affected by Mosaic Deforestation and Degradation	VM0037	Scope 14
VMD0008 Estimation of baseline emissions from forest degradation caused by extraction of wood for fuel (BL-DFW)	VMD0008	Scope 14
VMD0012 Estimation of emissions from displacement of fuelwood extraction (LK-DFW)	VMD0012	Scope 14
VMR0005 Methodology for Installation of Low-Flow Water Devices	VMR0005	Scope 3

Verra has inactivated select CDM methodologies from the VCS Program. The full list is available on the Verra website under Inactive CDM Methodologies here.

b. Rationale for the change:

Revisions to CDM Methodologies:
VMR0007 and VMR0008 revise the underlying CDM methodologies and integrate a discount factor to account for uncertainty related to the displacement of production of virgin materials caused by the project activity. These revisions align with the updated VCS Methodology Requirements published and submitted to the TAB in Verra's August 2023 Material Change notification.

Revised VCS Methodologies:
Revising methodologies ensures that they are aligned with the best available science and the latest program requirements. Some revisions focus on improving the integrity of the methodologies, while others expand the scope by broadening project eligibility.

Inactivated Methodologies:
Methodologies are inactivated for the following reasons:
-limited or no use
-the activities are excluded from the scope of the VCS Program
-a CDM methodology has been revised or replaced with a VCS revision, or new VCS methodology
- a VCS methodology has been superseded by another VCS methodology

c. Where the change is reflected in the Programme's documentation or other resource(s)[9]:

All methodologies are available on the VCS Methodologies website.

d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:

[9] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

Summarize the programme's process for developing further methodologies and protocols, including the timing and process for revision of existing methodologies. (Paragraph 2.1) A. Information contained in the programme's original application, including information submitted in response to follow-up discussions and questions pertaining to this question:

Q&A with ICAO in January 2024

Question (from ICAO, January 23, 2024):

Dear Mr. Howard,

We would like to inform you that the Technical Advisory Body (TAB) finalized its assessment and recommendations of the material changes submitted by Verified Carbon Standard (Verra) in August 2023. TAB recommendations will be considered by the ICAO Council at its 231st session in March 2024 and upon Council approval, the decision will be communicated to programmes.

In that regard, TAB requests that Verified Carbon Standard (Verra) confirms the assessment scopes and exclusions, as per paragraph 7.16 of the TAB Procedures. Please indicate whether or not Verified Carbon Standard (Verra) has voluntarily decided to narrow its preferred Scope of Eligibility, i.e., if it wishes to remove any activity types or methodologies from its Programme Assessment Scope and add them to the Programme Exclusions Scope.

The deadline for confirming any such changes is January 26, 2024.

It is important to note that if Verified Carbon Standard (Verra) does not send the confirmation, any future request to narrow the Scope of Eligibility after a Council decision (in those cases when programmes were approved as eligible) would have some implications such as delays or disruptions to the programme's inclusion in the ICAO document "CORSIA Eligible Emissions Units".

Please also note that this request is only to confirm the Programme Assessment Scope submitted previously by the programme and only permit material additions to the Programme Exclusions Scope forms. In most cases, TAB expects that the applicant would have no changes.

TAB wishes to thank Verified Carbon Standard (Verra) for its responsiveness to and active participation in TAB's 2023 assessment cycle, which made an important contribution to the advancement of its work.

Kind Regards,
Office of the Environment

Answer (from Verra, January 26, 2024):

Thank you for your message. In reference to paragraph 7.16 of the TAB Procedures, Verra would like to confirm that we do not wish to add activity types or methodologies to the VCUs excluded from the scope of eligibility for the Verified Carbon Standard (VCS) Programme, as set out in the latest version of the ICAO document "CORSIA Eligible Emissions Units".

The TAB may be aware that Verra has released major revisions to several methodologies in the AFOLU sector since the last submission of material changes on August 31, 2023. We plan to formally notify ICAO of these revisions in our next material change submission. We may at that stage seek a change in the Programme Assessment Scope and the Programme Exclusions Scope.

e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The latest VCS Methodologies are found here: https://verra.org/methodologies-main/. Any further material updates or changes to VCS methodologies will be communicated in the subsequent Material Change form.

CHANGE 8: Permitted Use of non-native monocultures from use in ARR and WRC project types
a. Description of the change (e.g., the addition, modification, deletion undertaken):
Verra issued a new version of the *VCS Standard (v4.6)* (PDF) that clarifies the program's ecosystem health safeguards. As a result of these clarifications, Verra will permit the limited use of non-native monocultures in Afforestation, Reforestation, and Revegetation (ARR) and Wetlands Restoration and Conservation (WRC) projects in the Verified Carbon Standard (VCS) Program. Per the program's ecosystem health safeguards, the use of non-native monocultures resulting in ecosystem conversion is only permitted in degraded ecosystems.
b. Rationale for the change:
The VCS Standard, v4.5 (PDF), released in August 2023, excluded non-native monocultures from use in ARR and WRC project types with start dates of March 1, 2024, or later as part of the broader updates to the VCS Program safeguards. Feedback on the introduction of this requirement indicated further consultation and potential refinement of the requirement was merited. The update included in v4.6 follows extensive stakeholder dialogue, expert analysis, scientific literature review, and a dedicated public consultation from October 24 through November 26, 2023. This update will enable urgently needed climate mitigation and other ecosystem service benefits, such as restoration finance, pulp and paper provision, and firewood resources for local communities where it can be demonstrated that ecosystems are safeguarded.
c. Where the change is reflected in the Programme's documentation or other resource(s)[10]:
VCS Standard, v4.7, section 3.19
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
This has not been previously communicated to ICAO.
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The most recent version of the *VCS Standard*, v4.7 (PDF), is available on the VCS Program website. Any further material updates or changes to VCS documents will be communicated in the subsequent Material Change form.

[10] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

CHANGE 9: Update to Methodology Development Process
a. Description of the change (e.g., the addition, modification, deletion undertaken):
The following update has been made to the *Methodology Development and Review Process:* Section 3.5.1 – Updated to clarify that Verra identifies a shortlist of eligible validation/verification bodies that meet all proposal and VCS Program criteria requests.
b. Rationale for the change:
These updates reflect the current best practices in developing and reviewing methodologies to ensure program integrity and focus methodology development on the areas of greatest potential climate impact. The option for Verra to lead the process is intended to streamline the process when there is a significant opportunity without an external proponent capable of developing a methodology in line with Verra requirements.
c. Where the change is reflected in the Programme's documentation or other resource(s)[11]:
Methodology Development and Review Process, v4.4
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
Material Change Form -2023 Verra has replaced the previous Methodology Approval Process with a new Methodology Development and Review Process. Updates include: 1. Restructuring and general improvements to the document. 2. Addition of Section 2 with overarching rules and guidance for methodology development. 3. Addition of a methodology idea note for the development of new and revised methodologies, tools, or modules. 4. Establishment of a formal option for Verra to lead methodology development by hiring an expert consultant. 5. Introduction of a requirement for developers to collaborate on concept notes, methodologies, and methodology frameworks under certain circumstances. 6. Updates to the process and requirements for methodology revisions. 7. Enhanced review process for approved VCS methodologies, modules and tools, including a regular review and potential update within five years of its last update or review. This update will become effective for new methodologies approved after the issue of this document. Existing methodologies will have a transition period of two years from the issue of this document. 8. General improvements to the methodology development and review process. 9. Modification of the use of external experts for certain assessment responsibilities. 10. Updated criteria for Verra to reject or put methodologies on hold. 11. Update to incorporate minimum potential GHG reduction and removal thresholds for new methodologies or major revisions that expand the scope of a methodology. 12. Updated public consultation requirements for minor methodology revisions and clarified public consultation process. 13. Update to conduct periodic reviews of methodologies from approved GHG programs. Overall

[11] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

updates to clarify the review process for existing methodologies. 14. Updates to the process for inactivation and exclusions of methodologies 15. Revised requirement regarding reassessment of standardized methods In the 2022 reassessment application, Verra's response to "Question 3.1 Clear methodologies and protocols, and their development process," included the following: "The most recent version of the VCS Methodology Approval Process document is available on the VCS website. January 2022 Update: Introduced dynamic performance benchmarks to the VCS Methodology Requirements, which enable benchmarks that take into consideration real-time performance changes in a given sector or activity type. Under this approach, data from control plots or sources that represent the baseline scenario is matched with monitored plots or data from the project to create a performance benchmark that will be updated at least every five years."
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The most recent version of the *Methodology Development and Review Process*, v4.4 (PDF) is available on the VCS Program website. Any further material updates or changes to VCS documents will be communicated in the subsequent Material Change form.

CHANGE 10: Updated Project Templates
a. Description of the change (e.g., the addition, modification, deletion undertaken):
New and updated project templates and representations have been added to the VCS Rules and Requirements page on the Verra website. These include updated Climate, Community & Biodiversity Standards (CCB) and VCS Program joint templates, updated Conversion and Loss Event representations, new representations relating to AFOLU buffer account compensation for reversals.
b. Rationale for the change:
The updates to Verra's project templates and representations aim to align with the latest VCS Program standards and improve consistency across documentation, addressing specific needs like non-permanence monitoring and enhancing accessibility for project proponents.
c. Where the change is reflected in the Programme's documentation or other resource(s)[12]:
• Updated CCB and VCS Program joint templates: These templates were updated to align with the latest versions (v4.3) of the VCS Program standalone project templates released in August 2023. • Updated Conversion and Loss Event representations: These representations were updated to align with the other VCS project representations that were released in August 2023. • New AFOLU buffer account compensation for reversals representations: These representations were developed and released to align with the updates to the VCS Program in August 2023 pertaining to the non-permanence monitoring and compensation requirements. • CCB and VCS Project Description Template, CCB v3.0, VCS v4.3 (DOC) • CCB and VCS Monitoring Report Template, CCB v3.0, VCS v4.3 (DOC) • CCB and VCS Validation Report Template, CCB v3.0, VCS 4.3 (DOC) • CCB and VCS Verification Report Template, CCB v3.0, VCS v4.3 (DOC) • The AFOLU Buffer Account Compensation for Reversals Deed (Single PP), v1.1

[12] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

• AFOLU Buffer Account Compensation for Reversals Deed (Multiple PPs), v1.0 • VCU Conversion Deed of Representation, v4.2 • Loss Event Representation, v4.2
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
Material Change March 2022: The revised AFOLU and JNR Non-permanence Risk Tools are currently out for public consultation; we anticipate publish the revised version in June 2022. Additionally, in anticipation of adding methodologies for carbon capture and sequestration activities, we are developing a Non-permanence Risk Tool for geologic sequestration. This should be published by December 2022. Material Change Submitted April 2021 Verra is in the process of updating the AFOLU Non-Permanence Risk Tools and associated rules, including updated to better assess climate change impacts. Updates are forthcoming and will be submitted when completed. One minor update is made with respect to reporting potential "loss events", which now must be reported within 6 months of a loss event, as noted in Sections 3.17.6 of the JNR Requirements Scenario 2 and 3.16.6 of Scenario 3.
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The documents mentioned in C represents the most up-to-date VCS program documents, incorporating recent enhancements and adjustments. Verra is committed to continually updating its program documents as necessary. Any further material updates or changes to VCS documents will be communicated in the subsequent Material Change form.

CHANGE 11: Mitigation Outcome Type Labeling
a. Description of the change (e.g., the addition, modification, deletion undertaken):
While it is not a material change, Verra has added labels for mitigation outcome types. It has also updated process guidance to specify that accountholders should contact the Verra Registry team to request mixed reduction and removal labels at VCU issuance.
b. Rationale for the change:
The combined effect of these modifications is to improve the Verra site and Verra Registry's usability and accessibility of current information.
c. Where the change is reflected in the Programme's documentation or other resource(s)[13]:
An updated version of the *Mitigation Outcome Type Labels Guidance*, v1.2 was published on 21 March 2024.

[13] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
This information was not previously submitted to TAB.
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
This document represents the most up-to-date version of the *Mitigation Outcome Type Labels Guidance, v1.2*, incorporating recent enhancements and adjustments. Verra is committed to continually updating its program documents as necessary. Any further material updates or changes to VCS documents will be communicated in the subsequent Material Change form.

CHANGE 12: Safeguards Strengthened
a. Description of the change (e.g., the addition, modification, deletion undertaken):
While it is not a material change, Verra has strengthened safeguards, including reporting requirements for social and environmental impact risk assessment, the release of chemical pesticides and fertilizers, the protection of staff and contracted workers employed by third parties, and the demonstration of no adverse impact on areas needed for habitat connectivity. Verra also clarified safeguard and stakeholder engagement requirements related to ecosystem health, property rights, human rights, and risks to stakeholders and the environment. Clarified that project proponents reporting on SDGs must also report on contributions to the host country's SDG reporting.
b. Rationale for the change:
Updates to the safeguard's requirements in the VCS Standard to provide more clarity on how these requirements align with the ICVCM safeguards assessment criteria.
c. Where the change is reflected in the Programme's documentation or other resource(s)[14]:
VCS Standard, v4.7, Section 3.18, 3.19,
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
Page 36-40 from Verra's 2022 reapplication form https://www.icao.int/environmental-protection/CORSIA/Documents/TAB/TAB%202022/Re-assessment%202022/VCS_Re-assessment%20Application_for%20public%20posting.pdf
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The most recent version of the VCS Standard, v4.7 (PDF), is available on the VCS Program website. Any further material updates or changes to VCS documents will be communicated in the subsequent Material Change form.

[14] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.

CHANGE 13: Strengthened Rules on Registration
a. Description of the change (e.g., the addition, modification, deletion undertaken):
The *VCS Standard*, v4.7, has been revised in Section 3.23 to include references to the VCS Program's rules on double registration. Specifically, Sections 3.23.3 and 3.23.6 now include requirements stating that projects previously registered under another greenhouse gas (GHG) program are eligible for registration and issuance under the VCS Program only after they have become inactive in the other GHG program.
b. Rationale for the change:
The updates to the VCS Standard further protect against the risk of double counting through double issuance of carbon credits and ensure the integrity of emissions reductions by allowing projects to register with VCS only after they are inactive in other GHG programs
c. Where the change is reflected in the Programme's documentation or other resource(s)[15]:
• *VCS Standard, v4.7,* Section 3.23
d. Information originally submitted to and assessed by TAB that would be altered as a result of this change (copy and paste in the field below); including any and all relevant descriptions or explanations provided by the Programme in its Application Form and accompanying materials and/or in response to any further inquiries from TAB during the course of the assessment(s) that informed TAB recommendations on the Programme's current eligibility:
Please see section d of Change 3 - Updated procedures necessary to prevent double-claiming – pages 7-13
e. How the information in "d." would be revised and submitted to any future (re-)assessment process, by updating the information in "d." to reflect any / all modifications to the Programme's original information that result from the change:
The most recent version of the *VCS Standard*, v4.7 (PDF), is available on the VCS Program website. Any further material updates or changes to VCS documents will be communicated in the subsequent Material Change form.

[15] If documents or resources evidencing the change are not publicly available, please include this information in an attachment to this form and clearly identify any business-confidential information.