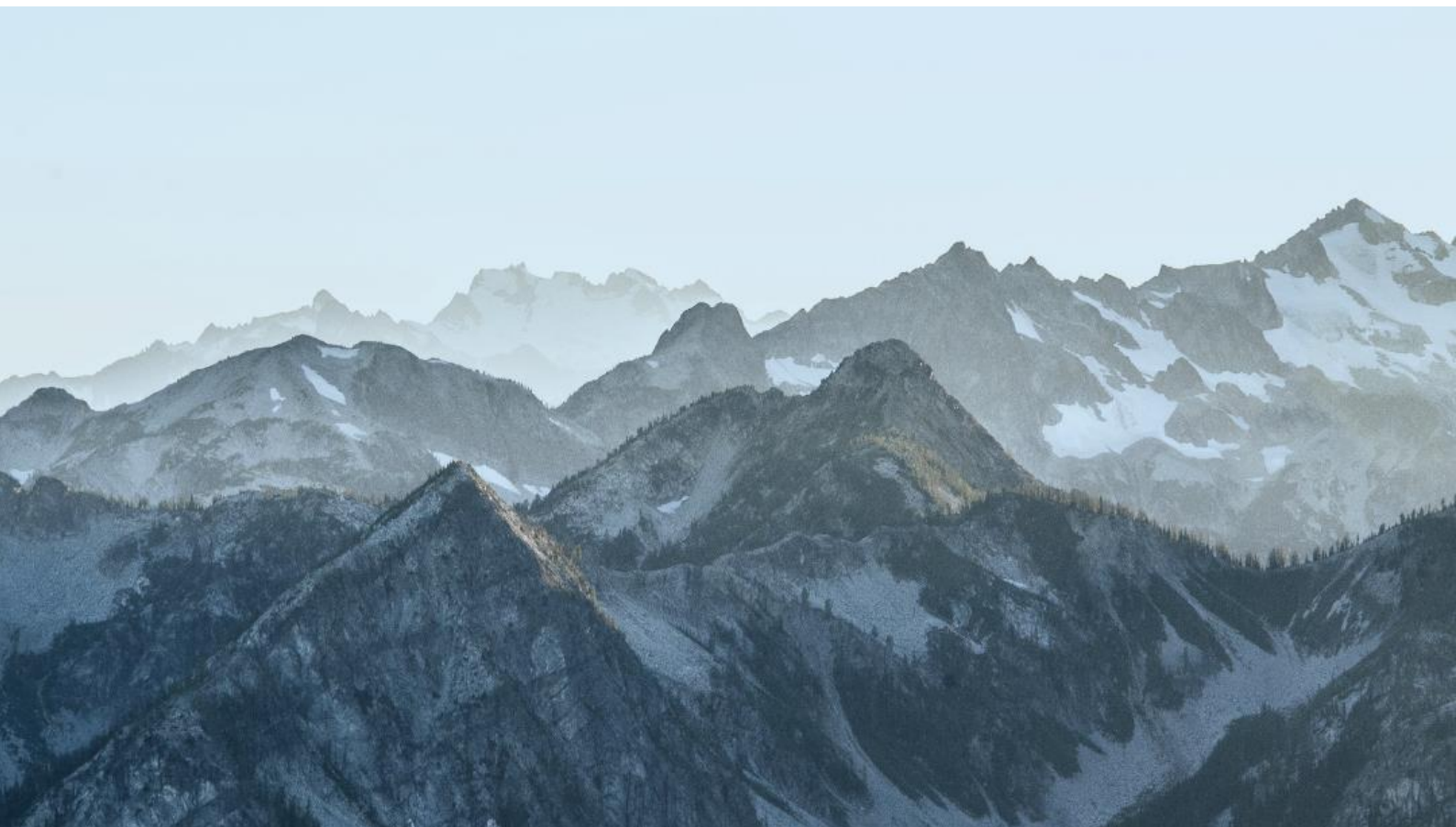




Analysis of the ICVCM's core carbon principles and assessment framework

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DISCLAIMER

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Abbreviations

ACR	American Carbon Registry
AF	Assessment Framework
AP	Assessment Procedure
BAT	Best Available Technology
BAU	Business-as-usual
CAR	Climate Action Reserve
CCP	Core Carbon Principle
CCQI	Carbon Credit Quality Initiative
CCS	Carbon Capture and Storage
CDM	Clean Development Mechanism
CIWP	Continuous Improvement Work Program
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
FPIC	Free, prior and informed Consent
GHG	Greenhouse gas
GS4GG	Gold Standard for the Global Goals
HCFC-22	Chlorodifluoromethane
HFC-23	Hydrofluorocarbon
ICVCM	Integrity Council for the Voluntary Carbon Market
JREDD+	Jurisdictional REDD+
MO	Mitigation outcome
MRV	Measurement, reporting and verification
MSWG	Multi-stakeholder working group
NDC	Nationally Determined Contribution
REDD+	Reducing emissions from deforestation and forest degradation in developing countries
RMP	Rules, modalities and procedures
SBM	Supervisory Body of the Article 6.4 mechanism
SOC	Standards Oversight Committee
VCM	Voluntary Carbon Market
VCMi	Voluntary Carbon Markets Integrity Initiative
VCS	Verified Carbon Standard
VVB	Validation and Verification Body

1. Introduction

The Integrity Council for the Voluntary Carbon Market (ICVCM) is a stakeholder-led governance body for the voluntary carbon market (VCM). The initiative's objective is to build trust in the VCM by enabling high-integrity carbon credits, thereby unlocking additional financing into real and additional greenhouse gas (GHG) reductions and removals for the transition to 1.5°C. To this end, the ICVCM establishes and maintains a set of Core Carbon Principles (CCPs) and oversees standard setting organisations regarding their compliance with the CCPs.

The ICVCM CCPs are intended to become a global benchmark for carbon credits with high integrity. These ten CCPs are categorised into governance, emissions impact and sustainable development. The CCPs Assessment Framework (AF) operationalises the CCPs by outlining required criteria at the level of carbon crediting programmes and categories of credits to be CCP eligible (ICVCM 2024a). The requirements are complemented with attributes which represent optional requirements that – when met – qualify the association of these characteristics with specific carbon credits.

The Assessment Procedure (AP) describes how the ICVCM conducts an ex-ante assessment of programmes and categories against these criteria (ICVCM 2023a). Carbon crediting programmes that apply to ICVCM are assessed against the relevant CCPs and the respective requirements outlined in the AF. Change requests can be minor or require remedial actions before approval is granted. Carbon crediting programmes that are deemed CCP-eligible can tag issued credits with the CCP label if these have applied CCP-approved categories (ICVCM 2024b). Categories of carbon credits are assessed against the requirements applicable to categories in the AF. The ICVCM does not conduct ex-post nor activity-level assessments of carbon credits.

The Integrity Council is governed by a Board whose members also serve on the Standards Oversight Committee (SOC), the Governance Committee or the Market Formations and Communications Committee¹. The SOC is tasked with reviewing and providing recommendations to the Board on the outputs of the Expert Panel. The Expert Panel is a technical body that provides recommendations on the development and application of the CCPs and AF to the Governing Board.

In 2022, the ICVCM published draft versions of the CCPs, AF and AP, which were based on recommendations of its Expert Panel and a VCM stakeholder dialogue. The drafts were open to public consultation, resulting in received feedback of stakeholders from 39 countries across six continents (ICVCM 2023b). The CCPs as well as the programme-level AF and AP were launched in March 2023 and the category-level AF and AP were launched in July 2023. In January 2024, ICVCM published a consolidated version of the CCPs, AF and AP (version 2), which constitutes the latest standard for

¹ A new Indigenous Peoples and Local Communities (IPS and LCS) Committee is currently formed.

CCP eligibility. As of now, carbon crediting programmes with 98% of the market share of carbon credits and more than 100 active methodologies have applied and are being assessed. The ICVCM has approved the first five CCP-eligible carbon crediting programmes: American Carbon Registry (ACR), Architecture for REDD+² Transactions (ART) TREES, Climate Action Reserve (CAR), Gold Standard and the Verified Carbon Standard (VCS). Three other programmes have submitted applications. For already eligible declared programmes, the ICVCM will continue to oversee and ensure ongoing compliance with CCP rules. In parallel, the ICVCM is assessing methodologies for CCP-eligibility. When CCP-labelled methodologies are approved, CCP-eligible carbon crediting programmes can label credits issued under those methodologies as CCP-eligible. In May 2024, several methodologies for landfill gas capture and utilisation and for ozone depleting substances were approved as the first CCP-eligible methodologies.

The ICVCM intends to release successive iterations of its AF by 2026, already providing guidance elements that should be incorporated in future iterations in the latest AF. ICVCM's approach thus involves a phased increase in ambition, using the initial framework as a starting point. To achieve this continuous improvement, the ICVCM has established ten Continuous Improvement Work Programs (CIWPs), tasked with analysing complex issues and providing expertise. Current CIWPs to run until July 2024 address the topics of corresponding adjustment, share of proceeds for adaptation, baselines and Nationally Determined Contributions (NDCs), sustainable development benefits and social safeguards and permanence (ICVCM 2022b). Further CIWPs will address the issues of digital measurement, reporting and validation (MRV); market transparency, standardisation and scalability; oversight of Validation and Verification Bodies (VVBs) and MRV systems; simplified approaches for small projects and jurisdictional crediting approaches in 2024 (ICVCM 2022b). The input of the CIWPs will be summarised, made publicly available and be taken into consideration for the revised version of the AF due at the end of 2025.

This study aims to inform carbon market stakeholders, particularly private sector actors, about the ICVCM's work on credit quality (supply-side integrity). In Chapter 2, we assess the quality and robustness of the current AF. In Chapter 3, we assess the eligibility of some crediting programmes in the VCM regarding the ICVCM's AF. In Chapter 4, we discuss the alignment of the AF with the Paris Agreement. Chapter 5 concludes.

² REDD+ stands for reducing emissions from deforestation and forest degradation in developing countries including additional forest-related activities that protect the climate such as sustainable management of forests and conservation and enhancement of forest carbon stocks

2. Strengths and weaknesses of the assessment framework

In this chapter, we investigate the strengths and weaknesses of the AF (2024a) in terms of its environmental and social integrity. The environmental integrity of carbon credits is understood as ensuring that carbon credits represent real, additional and robustly quantified mitigation outcomes (MOs) (emission reductions and removals) that are not double counted, do not lock in emissions and for which non-permanence is addressed. Social integrity refers to activities that generate carbon credits that avoid negative environmental and social impacts and deliver positive impacts.

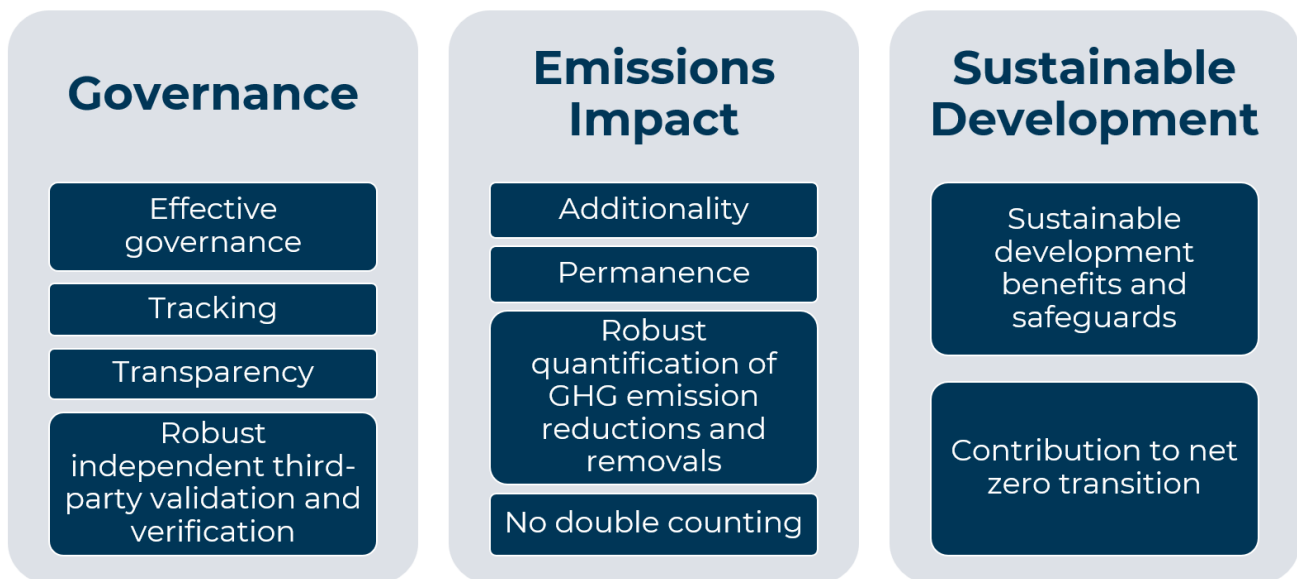


Figure 1: Core Carbon Principles

The ten CCPs are grouped into governance, emissions impact and sustainable development (see Figure 1). At the programme level, the AF specifies seven CCPs including effective governance, tracking, transparency, robust independent third-party validation and verification, robust quantification of GHG emission reductions and removals, no double counting and sustainable development benefits and safeguards. At the category level, relevant CCPs include additionality, permanence, robust quantification, no double counting, sustainable development benefits and safeguards and contribution to net zero transition.

2.1 Methodological approach

Our approach involves a comprehensive comparison of the AF against our understanding of current best practices and high-integrity approaches for the generation of carbon credits. Our understanding of high-integrity approaches builds on the current best practices applied by carbon crediting programmes as well as the work of independent initiatives such as the Carbon Credit Quality Initiative (CCQI) and the Nordic Dialogue on Voluntary Compensation. In addition, the Article 6.4 rules, modalities and procedures (RMP) are considered a global benchmark for carbon credit integrity.

Therefore, the ongoing operationalisation of these rules is also used as benchmark for this assessment.

The ICVCM incorporates requirements of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSI A) as part of its own framework. Our assessment will focus on the new ICVCM requirements but, for the sake of completeness, the CORSI A criteria are mentioned. In the following, we will first assess the AF requirements for carbon crediting programmes and subsequently, in section 2.3, the AF requirements relating to categories.

2.2 Requirements for carbon crediting programmes

Programmes that are already approved by CORSI A only need to fulfil the additional ICVCM requirements. For programmes that lack CORSI A approval, the assessment process includes evaluation against the CORSI A requirements alongside the ICVCM requirements.

2.2.1. Governance

Regarding “governance”, the AF specifies four CCPs that crediting programmes must fulfil, namely effective governance, tracking, transparency and robust independent third-party validation and verification. Each of these CCPs includes numerous requirements.

In addition to the CORSI A requirements on governance³, the requirements for the criterion effective governance include the existence of a board of independent members and the publication of an annual disclosure report of revenues, expenses and net assets across the past year including further organisation-specific information such as the existence of a process to ensure social and environmental responsibility, anti-money laundering and regulation for anti-bribery and anti-corruption. Further requirements for proficiency in public engagement, consultation and grievances⁴ include robust and transparent local and global stakeholder consultation that allow for public commenting, as well as a clear, transparent, impartial and potentially confidential process for addressing grievances.

For the CCP “tracking”, the ICVCM AF requires next to the CORSI A requirements⁵ the identification of the entity on whose behalf a credit was retired and the purpose of the retirement in the programme registry as well as existing procedures to address erroneous issuances of credits.

³ On governance, CORSI A requires that programmes should publicly disclose who is responsible for administration of the programme and how decisions are made.

⁴ Grievance is defined as “any procedure through which affected people can bring a complaint against a company or collaborative initiative and seek remedy” (Dalfiume and Michaelowa 2023)

⁵ CORSI A Identification and Tracking - individual tracking of carbon credits based on a serial number and identification of owners or holders, a secure registry and relevant connections to other entities, information on the international data exchange standard that the registry adheres to and public disclosure of all this information

Regarding the CCP “transparency”, ICVCM requires – next to the CORSIA requirements⁶ – the public disclosure of all relevant documentation including calculation spreadsheets, comprehensive mitigation activity design documents and existing processes for responding to requests regarding missing information and subsequent publication of those to enable the assessment by third parties.

Among the requirements for the CCP “robust independent third-party validation and verification”, are the need that VVBs are accredited according to a recognised international accreditation standard (e.g., ISO 14065 and 14066, rules of the Clean Development Mechanism (CDM) or the Article 6.4 Supervisory Body). In addition, there needs to be a process in place to manage VVB performance, to report poor performance, and in extreme cases to suspend or revoke participation.

Strengths

Regarding effective governance, a key strength is the requirement of needing to have in place a grievance mechanism or process to address grievances. While it is acknowledged as important, it is not yet consistently implemented across crediting programmes in the VCM. For example, the Global Carbon Council (GCC) has not put in place a centralised grievance mechanism but rather asks project owners to do so (GCC 2023). Most importantly, ICVCM is specifying certain characteristics of the grievance mechanism or process including the need to be clear, transparent, impartial and accessible (no costs involved). Especially the latter was not the case for Verra (Dalfiume and Michaelowa 2023). A recent study (Dalfiume and Michaelowa 2024) reveals significant improvements of the Verra and ACR grievance process.

Another key strength is the public disclosure of all tracking information, including the entity and purpose of the retirement. Given the limited availability of carbon market registry data regarding credit usage (Gabbatiss et al. 2023), these requirements can therefore significantly contribute to enhanced transparency. The requirement to have procedures in place for erroneous issuances and for identifying responsible entities for implementing remedial measures is a strength as it provides up-front clarity about the liability.

The requirement that carbon crediting programmes must provide relevant programme documents if these are not publicly accessible in their registries or on the website is a strong one. Currently, it is not always possible to find the project documents or emissions calculations in the registry of the respective VCM crediting programme (Carbon Market Watch 2024). If contacted by third parties, crediting programmes will need to ensure full disclosure. In the end, it will also depend on how the

⁶ CORSIA Transparency and Public Participation Provisions - public disclosure of gathered stakeholder information, local stakeholder requirements, provisions detailing how they are considered and the used quantification methodologies as well as the implementation of public comment periods

ICVCM deals with this issue when approving programmes, e.g. whether credits can only be tagged as CCP-eligible where the programmes confirm that all information is publicly available.

In addition, the oversight of VVB performance by the carbon crediting programme is a rather new requirement. While Verra does not have this in place, Gold Standard and ART TREES have performance reviews in place (also see chapter 3.1).

Weaknesses

The public consultation iteration of the AF included the requirement that an independent committee shall address grievances (ICVCM 2022a). While the current text refers to impartiality in the filing and resolution of grievances and confidentiality but only where applicable, the requirement of an independent process is not clearly specified anymore. The current best practice established by Gold Standard is, however, to involve an external agency (Dalfiume and Michaelowa 2023, 2024).

Regarding validation and verification, the continued promotion of the model where third-party auditors are selected and paid by the project developer, thus having an interest not to let the activity fail, is a weakness. This is currently common practice across carbon crediting programmes in the VCM. The current iteration of the ICVCM lacks provisions for future iterations to advance beyond this existing verification model.

While a previous version of the AF (ICVCM 2022a) included a requirement on normative programme documents for VVBs, this is not included in the current version anymore. The previous text required programme provisions for the VVBs' conformity and for audit processes and would have contributed to improved oversight of VVBs.

2.2.2. Emissions impact

The AF's requirements for carbon-crediting programmes regarding the emissions impact include CCPs on robust quantification of GHG emission reductions and removals and no double counting.

Under the CCP "robust quantification of GHG emission reductions and removals", it is required – in addition to the CORSIA requirements⁷ - that the carbon crediting programme shall have a process for developing and adopting updates to existing quantification methodologies. These and new methodologies must be reviewed by independent experts and be opened for a public stakeholder consultation. Processes need to be in place for suspending and withdrawing the utilisation of methodologies in instances of overestimation of mitigation outcomes or lack of additionality. Approved

⁷ CORSIA requires clear methodologies and protocols as well as processes to develop further methodologies. Carbon offset credits must be based on realistic and credible baselines and must be quantified, monitored, reported and verified.

methodologies shall address applicability or eligibility criteria, determination of the accounting boundary, additionality determination, a baseline scenario, quantification of the mitigation outcomes and monitoring practices. Clarity of the crediting period's length, guidance on its renewal, a systematic approach to ensure conservativeness in quantification and the assessment of uncertainty in assumptions, parameters and measurements are required from carbon crediting programmes. For programmes issuing both ex-ante and ex-post credits, a clear process for identifying ex-ante credits must be outlined, which are then not eligible under ICVCM.

Regarding the CCP "no double counting", the programme-level criteria include avoidance of double issuance and double use. Consequently, active mitigation activities already registered under another carbon crediting programme should not be eligible for registration and issuance of credits to prevent double counting. Once a carbon credit has been cancelled or retired, registry provisions should prohibit its further transfer, retirement, or cancellation to avoid duplication or misuse.

Strengths

A key strength is the establishment of criteria that the quantification of emission reductions and removals must be conservative, and that uncertainty must be considered in determining the degree of conservativeness. Pivotal is that the definition of uncertainty is comprehensive and includes assumptions, models, parameters and measurements. Most carbon crediting programmes only consider the principle of conservativeness in the context of sampling but do not consider systematically all sources of uncertainty. Neglecting uncertainty in baselines (e.g. for avoided deforestation projects) is a major source of over-crediting under current methodologies. The approach for ensuring conservativeness – if fully applied by the ICVCM in practice – would thus require carbon crediting programmes to clarify the concept's implementation in their programme provisions and reduce the risk of overestimating the impacts of activities.

Another strength is that the next iteration of the AF requires carbon crediting programmes to regularly review and update their quantification methodologies to continuously ensure environmental integrity. While methodologies in international carbon markets have improved over time with increasing practical insights, it was never a set condition. In addition, the AF clarifies that a specific time frame for the updates will be established, exemplary referring to every five years.

Since many crediting programmes do not have in place procedures for suspending the use of methodologies that have evidently resulted in the overestimation of mitigation outcomes or in non-additionality, the requirement to have them in place is stringent.

Weaknesses

A weakness is that the ICVCM does not require that methodologies must be reviewed by independent expert panels, as it is the practice under the CDM, the Article 6.4 mechanism and most larger

carbon crediting programmes, except for Verra (see Verra 2023a). The wording in the AF can be interpreted such that it is sufficient that experts review the methodology, such as individuals or experts in a VVB. Indeed, one of the reasons in the weaknesses of some Verra methodologies can be seen in that methodologies were only reviewed by the VVB and Verra staff but not an independent group of experts.

In addition, the EP recommended to consider policies in determining baseline emissions, but this requirement did not make it into the final version of the AF. Its inclusion would have been in line with Article 6 requirements. Noting that this is currently a weakness, there is hope that this will be somehow included as a (future) requirement due to the working group that has been put in place on baselines and NDCs (also see chapter 4).

2.2.3. Sustainable development

For sustainable development, the AF requirements for carbon crediting programmes include the CCP “sustainable development benefits and safeguards”, consisting of 12 criteria. The criterion “assessment and management of environmental and social risks” requires the alignment with CORSIA requirements⁸ as well as three additional requirements. Firstly, programmes must require activity proponents to abide with national and local laws, objectives, programmes and regulations and, where relevant, also international conventions and agreements. Secondly, activity proponent must assess associated risks of negative environmental and social impacts with regard to relevant safeguards, taking into account the activity’s scope and scale. Thirdly, activity proponents must ensure Free, Prior and Informed Consent (FPIC), where applicable, and conduct inclusive and culturally appropriate stakeholder consultations during project design and implementation, including with local stakeholders, and take these consultations into account and respond to local stakeholders’ views. Where there is a risk of negative impacts, activity proponents must include measures to minimise and address them in validated design documents and provide information on the implemented measures in the monitoring report.

Criteria for safeguards include requirements for labour rights and working conditions; resource efficiency and pollution prevention; land acquisition and involuntary resettlement; biodiversity conservation and sustainable management of living natural resources; Indigenous Peoples, Local Communities and cultural heritage; respect for human rights, stakeholder engagement; and gender equality. There are also requirements for robust benefit-sharing, the Cancun Safeguards for REDD+ activities and the requirement to ensure positive SDG impacts. The latter requires activity proponents to provide information on how the mitigation activity is consistent with the SDG objectives of

⁸ CORSIA safeguard and SD criteria – Safeguards must be implemented and transparently disclosed. This includes providing detailed information about the SD criteria and the specific monitoring, reporting, and verification processes that are established.

the host country and, if applicable, demonstrate any positive impacts through a qualitative assessment. The AF includes a list of requirements that should be improved for the next AF iteration.

Strengths

The AF's requirements for both ex ante assessment of potential negative impacts and local consultation at design stage, and ex post monitoring and reporting and consultation at implementation stage, as well as the requirements for FPIC and considering and responding to local stakeholder views, represent an improvement compared with current practice.

The requirements for safeguards are reasonably comprehensive, covering most areas of current best practice. They align with what carbon crediting programmes like Gold Standard have established for safeguards and go beyond some programmes' requirements such as the ACR which does not establish sustainability safeguards at all.

The requirement to ensure consistency with host country SDG objectives is in line with best practice and Article 6 requirements. The ICVCM recognises the ongoing evolution of relevant best practice approaches and the clear need for improvement of the AF in this area. The identified list of improvements for the next iteration is comprehensive, and includes, inter alia, an assessment of environmental and social risks related to the activity, its type, host country, scope and scale, as well as validation and verification requirements.

Weaknesses

The AF leaves the elaboration of requirements to programmes and does not provide common guidance or reference to recognised guidance such as the IFC Environmental and Social Performance Standards.

A key weakness is that the AF does not explicitly require the activity to implement an activity-level grievance mechanism for providing stakeholders with an opportunity to submit feedback or record concerns or grievances throughout the activity's lifetime. This falls short of current best practice. For example, the Gold Standard already requires activities to set up a grievance mechanism and provides guidelines for the mechanism. Furthermore, the AF does not mention this as an area of improvement for the next iteration.

The AF does not include requirements against corruption (beyond general anti-corruption guidance for the programme itself), as mandated by for example the draft Article 6.4 mechanism Sustainable Development tool. It also lacks requirements on health impacts on local communities.

Regarding SDG impacts, the AF focuses on positive SDG impacts and does not require consideration of trade-offs between SDGs, as recommended by the Expert Panel (ICVCM 2023b). The AF requires the disclosure of ex ante information on the consistency with host country SDG objectives and

possible positive SDG impacts in the validated design document, but it does not require ex post monitoring, reporting or verification of positive SDG impacts.

Regarding benefit-sharing, the benefit-sharing arrangements should be consistent with applicable national rules and regulations and the public availability of the resulting benefit-sharing outcomes are subject to applicable legal restrictions. Depending on the rules and regulation, this could limit the activity proponent's possibilities to design and implement robust benefit-sharing in line with best practice. The next iteration aims to ensure the transparency on use and management of revenues for benefit sharing.

2.3 Requirements at the category level

The AF also specifies requirements for categories of carbon credits. A category of carbon credits refers to credits originating from the same type of mitigation activity (e.g. wind power generation), registered under the same carbon crediting programme (e.g. VCS), and adhering to complementary standards (e.g. SD VISta). In addition, the emission reductions or removals in one category have to be quantified using the same quantification methodology (incl. version, tools, modules) and must share other common features, including geographical location and technical characteristics (ICVCM 2024e).

In its ongoing assessment of categories, ICVCM differentiates between 35 different activity types, such as biodigesters, efficient cookstoves, lighting efficiency, renewable energy (off grid) and waste heat recovery (ICVCM 2024d). The different types of mitigation activities are grouped according to how they will be assessed under the ICVCM, differentiating between an internal assessment by the ICVCM's Secretariat staff and its experts ("fast track"), a multistakeholder assessment to be carried out by methodology experts within and outside the Council and the ICVCM's SOC⁹ (Multi-stakeholder working group – MSWG) or categories of credits that are unlikely to meet the AF's requirements. Categories that are considered unlikely to meet the AF's requirements will only be assessed once the assessment of the other categories is completed.

2.3.1. Emissions impact

The AF section on "Emissions impact" includes sections on additionality, permanence, robust quantification, and no double counting.

Additionality

The CCP requirements regarding additionality include ten sub-requirements and a section on additional requirements to be introduced in the next AF iteration. The AF includes various methods

⁹ The SOC is a sub-committee of ICVCM's Governing Board

and approaches to demonstrate additionality such as regulatory additionality, prior consideration and financial additionality test (investment analysis) or barrier analysis and common practice/market penetration assessment. For all these different methods, the CCPs AF establishes clear requirements including for standardised approaches (e.g. positive lists). Lastly, the section on additionality contains specific criteria for jurisdictional REDD+ programmes.

Strengths

The requirements for assumptions, data and conclusions for the investment analysis are particularly strong regarding the required consistency with information presented to the company's decision-making management and investors/lenders. Consequently, discrepancies between mitigation activity design documentation and that presented information should not be possible anymore as it often used to be the case in the CDM context.

Weaknesses

Regarding regulatory analysis, it needs to be ensured that the registration of mitigation activities only occurs when the carbon credits generated reflect emission reductions or removals beyond what is mandated by relevant enforced legal requirements of the host country. A weakness of this criterion is the reference to the legal requirement's enforcement level. It is argued that for high-income countries, all legal requirements are deemed to be enforced while for non-high-income countries, there is the possibility to provide up-to-date information of non-enforcement relevant for the respective activity. This results in the same enforcement conundrum as under the CDM where activity proponents had to prove that the regulation is not enforced which opens loopholes. While the AF requires clear evidence of non-enforcement (authoritative and up-to-date information), no time limitations are introduced until when such assertions of unenforced legal requirements can be made. In addition, it is not clear what relevant legal requirements is referring to and whether that also includes firmly scheduled requirements next to existing ones. After the activity's registration a review of newly emerging legal requirements is only deemed necessary at an "appropriate frequency" and is not specified sufficiently. This makes it difficult to meet the best practice in the VCM, which necessitates immediate termination if new legal requirements emerge, and regulatory additionality is no longer ensured (as proposed by CCQI 2022). For example, ACR (2023) requires that legal requirements are assessed throughout the crediting period and if such a requirement comes into force the activity will be no longer eligible for crediting from the date the requirement takes effect. Also, CAR (2023) specifies that a review of new legal requirements may be required each verification period.

The AF outlines two approaches to prior consideration of carbon credits. Approach A requires a demonstration of prior consideration through evidence prior to the start date of the activity which is assessed by a VVB and/or by the carbon crediting programme. This documented evidence needs to be provided to the crediting programme not later than one year after activity start and the time

between the documented date and the registration date needs to be reasonably limited. Instead of publicly available documented evidence, credible third-party attested evidence is currently also allowed under approach A. This approach corresponds largely to the approach pursued under the CDM and GS, though both have more rigorous requirements than what the ICVCM demands. Approach B's focus lies on limiting the period between activity start date and validation by a VVB and/or the crediting programme or the submission for registration that accounts for the time to submit the relevant documentation. This approach is based on the current practice of Verra's VCS, ACR and CAR. The key difference to approach A is that under approach B, the documentation does not need to be specifically validated. According to the documentation of the stakeholder consultation there were strong objections of project developers regarding the project-by-project analysis of prior consultation evidence, basically approach A in the current AF (ICVCM 2023b). Projects can currently pass the prior consideration test without providing documented evidence based on approach B. According to approach B, the reasonable maximum period that can pass before submitting documentation is not clearly specified whereas the ICVCM's Expert Panel proposed two years as a threshold (see ICVCM 2023b). In addition, the demonstration through validated evidence prior to activity start, which implies dropping approach B and the possibility to submit third-party attested evidence under approach A, is not clearly mandated ("may" language) as part of the continued improvement of AF version due in 2025. Overall, the ICVCM thus sets less stringent requirements than current best practice in the VCM.

Regarding the concrete approaches or tests to additionality demonstration, the AF allows for a combination of the market penetration/common practice with an investment analysis or a barrier analysis. Another possibility is a standardised approach. The current additionality requirements have a significant weakness by not mandating the joint application of an investment analysis and barrier analysis. Both the investment analysis and barrier test have been equally contested among carbon market experts in the past under the CDM and in the VCM as being susceptible to manipulation (Michaelowa et al. 2019; Schneider et al. 2024). According to the current AF, both tests can be combined with a market penetration assessment, but the activity proponent can still choose between applying either an investment or a barrier test. Especially in the case of higher risks of non-additionality, the best practice would be to require consideration of financial attractiveness. For the barrier analysis, the types of barriers are too broadly defined, and the inclusion of any other barriers if these are mentioned in the quantification methodology or other documents is allowed. The barrier analysis in the CDM TOOL01 (also often applied in VCM methodologies) is for example more stringent as it clearly defines the test's eligibility.

The additionality requirements that specifically apply to jurisdictional REDD+ (JREDD+) are generally less stringent than the additionality criteria for other types of activities as they do not require the demonstration of a concrete additionality approach. Some EP members specifically recommended that the programme proponents must provide evidence that demonstrates that the expected revenues received per carbon credit over the initial crediting period can sufficiently cover

the costs over this period (ICVCM 2023b). The rationale is that if the expected carbon credit revenues are only covering a small part of the costs, the additionality of the jurisdictional programme is less reasonable (ICVCM 2023b). It became also clear though that no JREDD+ programme would currently pass this requirement as the current practice is quite different. In the end, the Board decided not to require this and instead included a decisively weaker wording calling for the demonstration that expected revenues from carbon credits are critical for enabling the implementation of the JREDD+ programme. This cannot be considered a concrete additionality test though and validation/verification by a VVB and/or the carbon crediting programme is only required for transparency-related requirements (e.g. submission of implementation plan etc.). The threshold is set considerably lower for JREDD+ programmes, most likely to accommodate existing JREDD+ programmes and their requirements.

Permanence

The criterion permanence comprises five requirements and additional information on changes in the next AF iteration. The five requirements cover: a list of categories to which permanence requirements apply, compensation requirements for reversals, monitoring and compensation period requirements, compensation mechanism demands and specific criteria for jurisdictional REDD+ permanence.

Strengths

A strength of the permanence requirements under the AF is that project developers are responsible for compensating avoidable reversals (e.g., from harvesting). This avoids moral hazard issues which would arise if other entities would assume this responsibility. Moreover, the AF treats ceasing of monitoring and verification as an avoidable reversal which, in turn, must be compensated by the project developer.

The AF also requires crediting programmes to withhold further carbon credit issuance until avoidable reversals have been compensated. A noteworthy improvement of the next AF iteration will be the requirement for carbon crediting programmes to have provisions in place for the continued operation of the pooled buffer reserve even if the programmes cease to operate.

Weaknesses

The AF's permanence requirements have several important shortcomings. The AF requires a monitoring and compensation period of at least 40 years beginning from the start of the first crediting period. This is not an ambitious requirement, for two reasons: First, using the start of the crediting period as the beginning of the monitoring and compensation period implies that any emission reductions or removals credited towards the end of the period may only be permanent for very few years. A better approach is to begin the monitoring and compensation period from the vintage year of the mitigation outcome generated. Climate Action Reserve (CAR), for instance, already requires project owners to monitor and verify projects for a period of 100 years following the issuance of CAR credits, rather than counting from the start of the first crediting period (CAR 2023). The Expert Panel proposed a similar approach for the ICVCM (ICVCM 2023b). It is not clear why the Board of the ICVCM did not follow this proposal as the current practice of other carbon crediting programmes could have been accommodated easily by identifying for each credit when the mitigation outcome occurred and how long the period for monitoring and compensation is, thereby identifying those credits that have at least a 40-year-period from the vintage year. This information is readily available. Secondly, the length of the monitoring and compensation period is insufficient. The AF requires projects to assure permanence for 40 years from the start of the crediting period. This period is insufficient to make an effective contribution to achieving the temperature goals of the Paris Agreement. To achieve the temperature goals, cumulative CO₂ emissions matter. A delay in CO₂ emissions of 40 years would not contribute to achieving these goals. Moreover, several crediting programmes already use longer periods or are considering moving towards longer periods. For instance, CAR requires projects with reversal risks to monitor and verify projects for 100 years following the issuance of CAR credits (CAR 2023). VCS is considering a 100-year requirement for its projects. The CCQI methodology (2022) also recommends longer time-horizon for monitoring reversals, meaning 100 years or more, from start of first crediting period as assurance that future reversals are addressed. Therefore, the AF is setting a low benchmark with its 40-year period.

Regarding the sufficiency of buffer pools, a general weakness is that even though a 20% threshold or a risk-based approach for the placement of credits in the pool was established, these values are not based on the scientific evidence of what would be necessary to compensate for reversals. The available research suggests that the buffer of existing carbon crediting programmes may be much smaller than necessary to compensate for future reversals (Badgley et al. 2022). Additionally, the ICVCM does currently not require carbon crediting programmes to conduct stress tests of their buffers. This topic was moved into the CIWP on permanence (ICVCM 2023b).

The disparity in permanence standards between mitigation activities with reversal risks and JREDD+ programmes is one of the biggest issues overall in the AF. The requirements for JREDD+ programmes do not specify a 40-year monitoring period for reversals. In fact, it is only specified that the buffer pool needs to be able to accommodate a reserve that is proportional to the reversal risk

over a minimum of 40 years. Consequently, the ICVCM does not even require any monitoring whether reversals occur, and no action must be taken if they occur. The requirement for JREDD+ seems to have been weakened to accommodate ART TREES. According to the second version of TREES (ART 2021a), ART does not extend the monitoring period beyond the period that a registered activity participates in the programme. Moreover, a registered activity can leave the programme at any time. ICVCM will continue to analyse the appropriateness of JREDD+ permanence criteria for future iterations of the AF.

Robust Quantification

The requirements for the “robust quantification of emission reductions or removals” include ensuring a clear delineation of the activity’s boundary, conservativeness in setting the baseline scenario, considering uncertainty and perverse incentives for inflating baselines, frequent updates or reviews of the baseline scenario, consideration of leakage sources, ensuring attributability of credited mitigation outcomes, short aggregate crediting periods (to allow increasing ambition over time) and robust monitoring. Lastly there is also a section on requirements for the next AF iteration.

Strengths

The requirements for robust quantification of mitigation outcomes make it clear that overall uncertainty needs to be considered to ensure conservativeness. This shall comprise all causes of uncertainty including in assumptions (e.g., baseline scenario), estimation questions or models, parameters (e.g., default values), and measurement approaches. While it was also an important principle in the CDM, the existing carbon crediting programmes in the VCM do not clearly define this as also outlined in chapter 2.2.2. Consequently, the consideration of scenario uncertainty in assumptions and further data is a significant advancement.

Weaknesses

A clear shortcoming is that the enforcement level/scope of policies and legal requirements to be considered in the baseline scenario is mentioned implying that except for high-income countries, the enforcement must be widespread to be considered. This reopens doors for long debates whether a policy or legal requirement is enforced or not instead of clear requirements.

No Double Counting

At the category-level the AF establishes requirements concerning double issuance, and double claiming that are within the control of the activity. The double use requirement is established at the programme level since they can be best controlled at that level. The avoidance of double counting at the category level comprises three criteria namely the requirement for provisions of potential overlapping claims, ensuring no double claiming with mandatory domestic mitigation schemes and prevention of double claiming of GHG mitigation from other environmental credits.

Strengths

The requirements are thorough in that they require that there be no double issuance or overlapping claims between different mitigation activities both within and across crediting programmes. The AF also requires that there be no double claiming with mandatory domestic mitigation schemes as well as no double claiming of GHG mitigation arising from other environmental credits. This is an improvement over the CDM. The AF's approach to avoiding double issuance and double use is thus comprehensive and takes into consideration potential overlaps between methodologies, as well as crediting and mandatory mitigation schemes (such as emissions trading systems).

2.3.2. Sustainable development

Sustainable development benefits and safeguards

For categories, the AF's requirements for sustainable development benefits and safeguards are designed to apply to all carbon credits, also those issued by programmes before the introduction of programme-level sustainable development requirements. Activities should meet CORSIA requirements for having in place safeguards to address environmental and social risks and for publicly disclosing sustainable development criteria and provisions for monitoring, reporting and verification, if any. In addition, for both safeguards and sustainable development benefits, programmes must provide information on their specific requirements and on any third party-linked requirements (e.g., certification scheme or IFC Environmental and Social Performance Standards) typical for the category. For the next iteration, the ICVCM will develop further criteria and a risk and impact rating framework for categories, as well as methodologies for SD impact measurement and attribution.

Strengths

The AF recognises the need to develop further criteria and a risk and impact rating framework for categories, and methodologies for substantiating the level of SD benefits achieved and attributed to the activity.

Weaknesses

The AF lacks category-level requirements for risk assessment and SDG impact measurement. These will only be developed for the next iteration. This means that safeguards, which are critical aspect of carbon credit integrity, are effectively unregulated for the time being (Calyx Global 2023). This said, the ICVCM includes an optional CCP for quantified positive SDG impacts, allowing credits that apply current best practice for quantifying positive SDG impacts to showcase them.

The absence of a grievance mechanism at the activity level within the AF, and the lack of plans to integrate such requirements in the foreseeable future, stands out as a notable weakness of the ICVCM framework.

Contribution to net zero transition

The CCP “contribution to net zero transition” includes a list of categories that are not eligible to be CCP-approved, such as activities that lead to a direct increase in fossil fuel extraction or relate to coal-fired electricity generation or fossil fuel extraction. Programmes must ensure that new or revised methodologies require mitigation activity proponents to assess compatibility of the mitigation activity with transition to net zero by reference to the net zero objectives of the host country. In the next iteration, this requirement may be extended to existing active methodologies.

Strengths

Compatibility with and contribution to net zero transition is a new requirement and an improvement to current practice. It promotes the alignment of carbon crediting programmes and activities with the long-term temperature goal of the Paris Agreement. The negative list of activities helps to avoid lock-in of emissions, in line with the requirements of the Article 6.4 mechanism.

Weaknesses

The AF lacks requirements to actively promote activities that are compatible with a net zero transition. This could be promoted by requiring methodologies to include an assessment of whether the activity adopts transformative technologies and contributes to innovation, in line with CCQI requirements (CCQI 2022).

3. Eligible carbon crediting programmes and activity types

3.1 Eligibility of carbon crediting programmes

In this chapter, we first discuss which carbon crediting programmes would be eligible for a CCP label. The assessment is based on our own assessment of the fulfilment of CCP requirements. As noted above, ICVCM is currently assessing the same question and has in fact already announced the first results. At the beginning of April 2024, the Integrity Council’s Governing Board approved ACR, CAR and Gold Standard as CCP-eligible (ICVCM 2024c). In May 2024, Verra and ART followed. Once CCP-approved methodologies exist and carbon credits are issued based on these, the five crediting programmes can label these accordingly.

In our assessment¹⁰ we focus on the following three carbon crediting programmes: Gold Standard for the Global Goals (GS4GG), VCS and ART TREES. In the following, the focus of the assessment lies on the additional ICVCM criteria and requirements at the programme level introduced in chapter 2.2 and not on the CORSIA eligibility which is given in the case of GS4GG and VCS but not ART TREES yet.

Table 1: Carbon crediting programmes’ eligibility for the CCP label

	Requirements¹¹	GS4GG	VCS	ART TREES
Effective governance	Existence of board with independent members	Yes	Yes	Yes
	Publication of annual report (incl. revenues, expenses, net assets etc.)	Yes ¹²	Yes ¹³	Yes
	Process for corporate social and environmental responsibility	Yes ¹⁴	Yes	Yes
	Robust anti-money laundering process & anti-bribery and anti-corruption guidance and regulation	Yes	Yes ¹⁵	Yes

¹⁰ This analysis was conducted in parallel to ICVCM’s own assessment and finalised before some of ICVCM’s documents or announcements were published. It needs to be noted that the authors’ assessment can diverge from ICVCM’s assessment as it is based on our understanding of the programmes’ processes and requirements.

¹¹ The descriptions are considerably shortened in this table, for complete description see chapter 2.2 of the AF

¹² Gold Standard 2024

¹³ Verra 2023c

¹⁴ GS 2023a

¹⁵ Verra 2023d

	Requirements¹¹	GS4GG	VCS	ART TREES
	Robust and transparent local and global stakeholder consultation (public commenting + resolution)	Yes	Yes	Yes
	Clear and transparency grievance process that ensures impartiality and where appropriate confidentiality in the filing and resolution of grievances	Yes (external agency to manage grievance but more clarity needed on internal management and formation of Appeals Committee) ¹⁹	Partially (complex eligibility threshold for accepting complaints; numerous provisions that it can act at its "sole discretion") ¹⁶	Partially (composition of Appeals Committee requires further attention) ¹⁹
Tracking	Entity and purpose of retired credit publicly disclosed	Partially (on a voluntary basis; mandatory for authorised VERs) ¹⁷	Partially (information not always provided in registry) ¹⁸	Yes ¹⁹
	Process for addressing erroneous issuances	Yes	Yes	Partially (no credits to be invalidated once issued, adjustments to be done in current or next reporting period) ²⁰
Transparency	All necessary information is made publicly available (for registration or registered activities)	Yes	Yes	Yes
	Mitigation activity design document is made publicly available including information on methodology used, environmental and social impacts etc. (for registration or registered activities)	Yes	Yes	Yes
	Process in place to answer information requests and that enable subsequent access to relevant information	Yes	Yes	Partially (no detailed process, but requested missing information must be made available)
Robust independent third-party validation and verification	Require VVBs to be accredited by a recognised international accreditation standard (e.g., according to the current edition of ISO 14065 and ISO 14066, or per rules relating to the UN-FCCC Kyoto Protocol Clean Development Mechanism or Paris Agreement Article 6.4 Supervisory Body)	Yes (refers to UN-FCCC-CDM accreditation; reference to ISO 14065 but not ISO 14066 (2023)) ²¹	Yes (refers to UN-FCCC-CDM accreditation; reference to ISO 14065 but not ISO 14066 (2023)) ²²	Yes (reference to ISO 14065 but not ISO 14066 (2023)) ²³

¹⁶ Dalfiume and Michaelowa forthcoming

¹⁷ See example in impact registry: <https://registry.goldstandard.org/batch-retirements/details/160551>

¹⁸ Verra 2021

¹⁹ See example in ART's registry: <https://art.apx.com/myModule/rpt/myrpt.asp?r=206>

²⁰ ART 2021b

²¹ Gold Standard 2021

²² Verra 2024a

²³ ART 2021b

	Requirements ¹¹	GS4GG	VCS	ART TREES
	Process for managing VVB performance including systematic review and addressing of performance issues (incl. suspension and revocation of participation)	Yes ²⁴	Yes ²⁵	Yes ²⁶
Robust quantification of GHG emission reductions and removal	Process for developing and adopting updates to existing quantification methodologies	Yes	Yes	Yes
	Approved methodologies that cover eligibility criteria, accounting boundary determination, additionality determination, baseline scenario establishment, quantification of MOs, monitoring practices	Yes	Yes	Yes
	New and revised methodologies need to undergo review by group of independent experts and public stakeholder consultation	Yes	Yes ²⁷	Yes
	Procedures for reviewing, suspension and withdrawal of methodologies in case of overestimation of mitigation outcomes or that additionality might not be ensured	Yes	Yes (without clear reference to overestimation or non-additionality though) ²⁸	No (no mentioning of suspension and withdrawal in case of overestimation of mitigation outcomes)
	Disclosure of GWP values used to calculate CO ₂ equivalence	Yes	Yes ²⁹	Yes
	Guidance on steps and requirements for renewal of crediting period incl. for reassessment of baselines scenario	Yes	Yes	Yes
	Assessment of overall uncertainty of MOs associated with activity type and/or activity proportion to assess the overall uncertainty regarding approved methodology (e.g., uncertainty in assumptions, models, parameters, measurements etc.)	Partially (some language on estimating uncertainty relevant to the project and baseline scenario but not overall uncertainty) ³⁰	No	Partially (no reference to activity type uncertainty but risk assessment regarding activity data and emission factors) ³¹
	Systematic approach to ensuring conservativeness in quantification methodologies	Yes	Yes	Yes (through application of an uncertainty adjustment factor)

²⁴ Gold Standard 2021

²⁵ Verra 2024b

²⁶ ART 2021b

²⁷ Verra 2023a

²⁸ Verra 2023a

²⁹ Verra 2023b

³⁰ Gold Standard 2023b

³¹ ART 2021a

	Requirements ¹¹	GS4GG	VCS	ART TREES
	Programme documents to consider existing government policies and legal requirements when determining baseline emissions	Yes	Yes	Yes
	Procedures to transparently identify units that are issued ex-ante and not eligible under ICVCM	Yes	Yes	Yes (as ex-ante are not eligible)
No double counting	No double issuance and double use	Yes	Yes	Yes
SD benefits and safeguards	Procedures for addressing environmental and social risk are considered and aligned with safeguards requirements	Yes	Partially	Yes (compliance with Cancun Safeguards)

Our assessment shows that GS4GG, VCS and ART TREES comply with most of the AF requirements. However, we also identified some gaps which would in our opinion prevent CCP eligibility without adjustments. For example, the grievance processes of VCS and ART TREES could still be improved to ensure impartiality (also see Dalfiume and Michaelowa 2024). While there are provisions in place to disclose the entity and purpose of retired credits publicly, this is often not enforced in the programme registries. ART TREES could improve its procedures for addressing erroneous issuances as credits cannot be invalidated once issued and establish a process to ask for missing information. In case of overestimation or non-additionality, ART does also not identify a clear process for the suspension of the methodology. In general, all three programmes should improve the consideration of overall uncertainty of mitigation outcomes and the methodology.

ICVCM will differentiate between minor change requests that do not prevent CCP eligibility and the need for remedial actions. To attain CCP-eligibility, the GS4GG programme was for example requested to update its registry procedures and functionality to require the identification of the entity on whose behalf credits are retired and the purpose of retirement for all credits (ICVCM 2024f). GS4GG complied with this request. Nevertheless, additional requests for the change to set up a stand-alone document with its anti-money laundering requirements as well as publish a comprehensive set of guidelines to complement and clarify the application of existing requirements concerning the assessment of overall uncertainty remain unaddressed. According to the ICVCM, this does not affect GS4GG CCP eligibility though (ICVCM 2024f).

In our assessment the GS4GG overall demonstrates alignment with more AF requirements than VCS and ART TREES. In the end, it will be the Governing Board’s decision what counts as minor change request, not preventing CCP eligibility and what requires remedial action before approving a programme as CCP eligible.

3.2 Eligibility of specific activity types

As outlined above, ICVCM classifies categories of credits in three assessment types: Internal assessment, multistakeholder assessment and those that are deprioritised as they are considered unlikely to meet the requirements of the AF. It is likely that deprioritised categories of credits will not be deemed CCP-eligible. Deprioritised categories and associated methodologies include the following (ICVCM 2024d; ICVCM 2024e):

- Hydrofluorocarbon (HFC-23) destruction: HFC-23 abatement from Chlorodifluoromethane (HCFC-22) production including the methodology AM0001 v1-5 (Decomposition of fluoroform waste streams)
- Industrial Energy Efficiency (supply side) including the methodologies on steam system efficiency improvements (AM0017, AM0018) and methodologies for water pumping efficiency improvements (AM0020)
- Nitrous oxide (N₂O) Abatement in Adipic Acid Production including methodology AM0021 v1
- N₂O Abatement in Nitric Acid Production including methodologies AM0034 and AM0028
- New Natural Gas Power including methodologies focusing on construction of a new natural gas power plant or cogeneration plant (i.e. AM0107, ACM0025)
- Waste Heat Recovery including methodologies ACM0012, AMS-III.Q., AM0066

In May 2024, the ICVCM approved the first categories as fulfilling the CCP requirements. This includes two categories:

- Landfill gas capture and utilisation
- Ozone Depleting Substances

A comprehensive analysis of all activity types and methodologies regarding their potential CCP-eligibility would go beyond the scope of this study. Therefore, we subsequently demonstrate potential shortcomings of certain activity types and/or methodologies regarding specific AF requirements and assess the decisions by the ICVCM on the first approval of the two categories.

Additionality

The CCQI scoring for common activity types and methodologies provides a useful indication for assessing the likelihood of passing ICVCM's additionality requirements (CCQI 2024b). Activity types that rely fully on carbon revenue, such as establishment of natural forests and landfill gas recovery, have the highest likelihood of additionality, while activity types with additional revenue streams, such as commercial afforestation and hydropower, have a lower score. In many cases, the score depends on the context and/or scale. For example, improved forest management through extended rotation age scores low in the US and higher in other countries (but only for long time spans), and a shift from production to production receives a high score in both the US and elsewhere, provided

there is no conservation easement. Large-scale hydropower receives a lower score than small-scale hydropower, grid-connected renewable energy scores lower than off-grid, and renewable energy has a low score in emerging economies and a higher score in least developed countries. Efficient cookstoves receive a low score in urban areas but a high score in rural regions.

Improved forest management is a broad term for forest management practices that aim to increase carbon stocks. Many activities fall under this category, such as extended rotation, increasing activity, production to conservation, reduced impact logging and avoided degradation (CCQI 2024b). Beyond the permanence issues inherent to any nature-based solution activity, methodologies for improved forest management activities often lack stringent requirements regarding regulatory additionality.

The likelihood of additionality of landfill gas and ozone depleting substances projects is generally considered to be high. Landfill gas projects are however sometimes supported through other policies, in particular in developed countries. Calyx Global, for example, draws a mixed picture of the quality of landfill gas projects and concludes that “some projects will receive the [ICVCM] label that may not be additional” (Calyx Global 2024).

Permanence

Nature-based solutions such as REDD+ activities or activities in so-called high forest, low deforestation (HFLD) countries³² are typically prone to reversal risks. As our analysis of the CCPs AF (see chapter 2.3.2) has shown, the permanence requirements are not sufficiently stringent regarding the starting point and length of the monitoring and compensation period. Consequently, many methodologies within nature-based categories (e.g., afforestation, reforestation, revegetation; REDD+) are likely to meet the current CCP requirements for permanence. This might change though once permanence requirements become more stringent.

Robust quantification

ICVCM establishes stringent quantification requirements including the consideration of overall uncertainty to ensure conservativeness, frequent baseline updates and attributability of the quantified emission reductions or removals to the mitigation activity. Many existing methodologies will not be able to meet these stringent requirements (CCQI 2024b). For example, TREES is less likely to meet the AF quantification requirements, particularly the requirement of attributability of the emission reductions or removals to the mitigation activity. Also, small-scale methodologies for efficient

³² Countries that have at least 50% forest cover and do experience deforestation at an annual rate below the 10-year historical global average (Fonseca et al. 2007)

cookstoves received a low score for robust quantification (CCQI 2024b), reducing their likelihood of compliance with the CCP requirements.

Overall, few categories of activities can be deemed to have a high likelihood of CCP-eligibility based on existing methodologies and in all scales and contexts. This said, many common activity types could be CCP-eligible if they applied improved quantification methods. A thorough methodology-specific assessment is required for making robust statements regarding CCP eligibility of certain activity types.

The methodologies for landfill gas projects that were recently approved by the ICVCM have been identified by CCQI and Calyx Global to likely lead to over-crediting due to the use of an oxidation factor of 0.1. Under the CCQI, all landfill gas methodologies receive a score of 2 or 3, while only a score of 4 or 5 would meet the requirements of the ICVCM. Calyx Global (2024) concludes that “some landfill gas credits will get the label, even if they do not strictly meet the CCPs”. As the issues with oxidation factors are well-documented in the literature (Chanton et al. 2009), this casts doubt whether the governing board of the ICVCM will adhere to its CCPs and AF or whether it will take policy decisions to approve certain categories even if they do not meet its own requirements. On landfill gas projects, a note was issued by the Governing Board that points to the challenges with oxidation factors (ICVCM 2024h). Nevertheless, the decisions on the methodologies by the Governing Board explicitly states that the “Category/Categories meet(s) the relevant criteria and requirements for CCP-approval” (ICVCM 2024h).

4. Paris Agreement alignment

In this section, we assess the extent to which the AF requirements align with the Paris Agreement, including alignment with the NDCs and LT-LEDS of host countries as well as with specific Article 6 requirements, such as avoidance of emissions lock-in. The ICVCM's CIWP on Paris Alignment covers corresponding adjustments in the context of voluntary corporate commitments, share of proceeds for adaptation as well as baselines and NDCs.

Taking into account NDCs and LT-LEDS

As NDCs are operationalised by national policy instruments, it is important to ensure that mitigation activities are additional to a host country's (unconditional) NDC. This requires taking unconditional NDC targets into account in both additionality determination and baseline setting. As discussed in Chapter 2, the AF requires considering existing relevant legal requirements in demonstrating additionality and taking into account existing relevant legal requirements as well as government policies in setting a crediting baseline. In the context of additionality determination, some crediting programmes already require assessment of legal requirements at each issuance while the AF has a vaguer requirement of re-considering legal requirements at “appropriate frequency”. For the AF to better align with (unconditional) NDCs, it should require the consideration of also “firmly scheduled”

policies for additionality determination. For baseline setting, the AF requirements for consideration of legal requirements and government policies is slightly more stringent in that baselines must be “updated or reviewed at a frequency that appropriately reflects changing circumstances”, including changes in government policies and legal requirements. While the AF does not require firmly scheduled policies to be considered in baseline setting, it does require updating the baseline as these policies enter into force. The NDC update would not necessarily be considered a change in government policies, but it would be put into effect through new policies and legal requirements. In this context, the Expert Panel recommended the alignment of crediting periods with NDC cycles from 2031 onwards which would establish a clear frequency for baseline scenario updates and reviews as part of a work programme (ICVCM 2023b). This suggestion seems to have been picked up by the SOC and/or Board through the inclusion of further work on NDCs and baselines under the CIWP on Paris Alignment 3.

Regarding the alignment with the Paris Agreement’s accounting system, including the NDC’s emissions balance, the EP noted that corresponding adjustments are becoming more relevant to maintain environmental integrity with the implementation of the Paris Agreement and the growth of the VCM (ICVCM 2023b). However, they also state that this requirement should only be introduced in the future once the necessary infrastructure is developed. For now, the ICVCM has introduced an (optional) CCP attribute for “host country authorization pursuant to Article 6 of the Paris Agreement” which includes requirements such as public disclosure of authorisation information received by the carbon crediting programme. On the claims side, Carbon Integrity Claims under the Voluntary Carbon Markets Integrity (VCMI) Initiative require the use of CCP-eligible carbon credits. It does not require host country authorisation, but it does require public disclosure on whether carbon credits have authorisation. To prepare for the future, the ICVCM is implementing a six-months work programme together with the VCMI to define scenarios and conditions of transfers for which corresponding adjustments would be required (ICVCM 2022b; 2023). This work programme will consider scenarios for differentiated claims based on the use of credits and their implications. ICVCM and VCMI focus on supply- and demand-side integrity, respectively, so their cooperation on corresponding adjustments is useful and complementary.

Alignment with the Paris Agreement’s long-term goal

As mentioned in chapter 2.3, the CCP on contribution to net zero transition is a clear strength of the AF, going beyond current market practice. The development of negative and positive lists to either exclude activities that do not meet this requirement or to actively promote activities that contribute to the net-zero transition has also been discussed contentiously by the Supervisory Body of the Article 6.4 mechanism (SBM). Unlike the SBM, ICVCM has succeeded in establishing a clear negative list, thereby contributing to the operationalisation of aligning with the Paris Agreement’s long-term temperature goal, which is also a requirement under the Article 6.4 Mechanism. The AF requirements focus on excluding incompatible activities but lacks requirements to actively promote

activities that are compatible with a net zero transition. This could be promoted by requiring methodologies to include an assessment of whether the activity adopts transformative technologies and contributes to innovation, in line with CCQI requirements (CCQI 2022).

While it is mentioned that the baseline scenario is to consider different scenarios including best available technology (BAT) or practice in the respective country, it is not clearly stated in the AF that the baseline scenario needs to be ambitious, e.g. at least below business-as-usual (BAU). While this is a clear Article 6 requirement, ICVCM supports the classical approach of requiring the consideration of uncertainty to ensure conservativeness. Given that the “below BAU” is a new requirement which the SBM has not even yet operationalised, it would be too early to expect VCM crediting programmes to have picked it up. The ICVCM has also established a CIWP on “baselines and NDCs” and will consider means to reduce the likelihood of overestimation and criteria to ensure ambition enhancement of the baseline. To which extent the CIWP will discuss the Article 6 requirement to “increase ambition over time” is not clear. To operationalise this principle, the SBM is currently discussing concepts to downward adjust the baseline continuously over time to ensure the alignment with Paris Agreement’s long-term temperature target. Downward adjustment of baseline scenarios has been contested among SBM members and Parties of the Paris Agreement. It is unlikely that ICVCM will incorporate this as a requirement before the SBM has officially adopted some guidance documents in this regard (expected for November 2024) but could consider including it in a future iteration of the AF.

5. Conclusion

By comparing the AF to best practice for high integrity of carbon credits, the analysis showed various strengths but also weaknesses. In some cases, we showed that the “high-integrity benchmark” established by the CCPs AF is lower than current best practice in the VCM. For some of these cases, the SOC or Board clearly deviated from the recommended actions of the Expert Panel, as summarised in ICVCM’s feedback statement (see ICVCM 2023b). The lower ICVCM threshold for these aspects can be traced back to lower thresholds in some carbon crediting programmes. Consequently, with the current version of the AF, the ICVCM seems to mainly accommodate existing carbon crediting programmes and only rarely sets thresholds at best practice in the market or beyond that to enhance integrity.

An alternative approach could have been to establish two thresholds, a more and a less ambitious one. A previous iteration of the AF included a differentiation between minimum thresholds and high ambition thresholds for the different criteria that operationalise the AF, which is however not included in the current version anymore. A two-tier approach for labelling carbon credits could have further enhanced environmental integrity and set a more ambitious standard while at the same time maintaining ICVCM’s relevance by accommodating existing standards.

To contribute to ambition raising, seven out of the 13 criteria in the AF already include an outlook for further development of the AF in the next iteration (namely included for the following criteria: robust quantification at programme level (5) and category level (10), SD benefits and safeguards at programme level (7) and category level (12), additionality (8), permanence (9), and contribution to net zero (13)). With those specifications carbon crediting programmes can already start adjusting their standards accordingly to ensure compliance with the next, more stringent version of the AF. It is nevertheless problematic that this exercise was not consistently applied for all criteria. The next version of the AF might thus face the same challenge of introducing more stringent criteria while not excluding too many programmes that might not meet the improved standards.

The CCPs consider various aspects of alignment with the Paris Agreement such as consideration of NDCs in additionality determination and baseline setting or scenarios in which corresponding adjustments are required. Many of those criteria are still being defined in work programmes and will only be included as requirements in future versions of the AF.

Another important question is whether the ICVCM will in practice follow its own requirements when approving carbon crediting programmes and categories. Many programmes and categories appear to clearly not meet the requirements of the ICVCM – nevertheless many of these categories are further investigated in MSWG. The first decision taken by the ICVCM on the approval of landfill gas capture and utilisation casts doubt whether the ICVCM will adhere to own requirements, given that the underlying issues are well documented in the literature.

While the CCPs AF does clearly not represent best practice across all principles, it is recognised that it raises the bar in the VCM to some extent (also see CMW 2023). Additionally, it might incentivise – depending on the assessment process' robustness – all carbon crediting programmes to implement some improvements in their provisions both at programme and at category level. The CIWPs draw a path for the establishment of upcoming requirements which might unlock new innovative approaches in the VCM. Whether these efforts by ICVCM can restore some of the trust in the VCM remains to be seen. For now, the AF requirements offer some high-integrity thresholds for selected principles and potentially improved consistency among the different carbon crediting programmes.

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