PUBLIC COMMENT ON ICAO EMISSIONS UNIT PROGRAMME REVIEW—JUNE 2020

Note: *These inputs to the Technical Advisory Body (TAB) public comment process were prepared jointly by Conservation International, Environmental Defense Fund and The Nature Conservancy. However, in submitting individually, there are some differences in content between our respective comments.*

Introduction

Eight offset credit programmes have applied for Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) eligibility in the second round, and two previously assessed programmes have submitted material updates. This public comment period represents a significant and positive step towards the operationalization of CORSIA, and the applications show a range of thoughtful responses to the Emissions Unit Criteria (EUCs). There is great interest and commitment from civil society and across the private sector, non-profit organizations, and governments to see CORSIA's promise fully realized, with environmental integrity.

We have analyzed each of the programme applications for their technical merit in fulfilling the EUCs. In the sections below, we highlight specific concerns and positive aspects of the different programme approaches to specific EUCs, including those relating to programme governance, permanence, additionality, double counting, and programme maturity. Although many programmes meet the majority of EUCs, there are some programmes, which would, as detailed below, require substantial strengthening to their programmatic design and further guidance from the TAB in order to meet the EUCs established by ICAO. In particular, further guidance on the EUCs regarding programme governance, sustainable development and double claiming is required.

Regarding programme governance: We request the TAB provides further guidance on the explicit requirement that each programme must have been continuously governed and operational for at least the last two years, as well as guidance on the necessary plans for the long-term administration of multi-decadal programme elements. In this application cycle and in last year's application cycle, there appears to be a variety of definitions of programme governance eligibility. It is difficult to perform a robust public comment review in the absence of clarity on these governance elements. We request the TAB provides clarity in the review comments for this year's applications, in hopes that such guidance can help future programmes understand when it is appropriate to apply for eligibility.

Regarding sustainable development: Programmes with natural climate solutions can provide significant environmental co-benefits—such as improved soil quality, cleaner air and water, higher coastal resilience, and biodiversity conservation—and social co-benefits for a myriad of stakeholders, including indigenous peoples and local communities. By helping to maintain natural habitats and ecosystem services at scale, as well as providing sustainable and diversified livelihoods, land-based offsets and natural climate solutions are also uniquely positioned to support and monitor contributions made to sustainable development. While these social and environmental co-benefits may not be present for all offset types, it is essential that all eligible units clearly and fully demonstrate their contribution to sustainable development and that they do no harm.

Regarding double claiming: Although programmes vary in the robustness of the safeguards and processes they have put in place to address double claiming, all programmes face some inherent uncertainty regarding how to craft their double claiming policies, as these rules will need to adapt to the future outcomes of the Article 6 negotiations. We ask that the TAB address this comprehensively; allow another review period for double claiming only once the Article 6 decisions have been finalized; or in the event that Article 6 decisions are not finalized in a timely manner for CORSIA purposes, to apply corresponding adjustments as per CORSIA rules and implementation elements, including Appendix A to the CORSIA programme application, together with the texts of the UN Framework Convention on Climate Change (UNFCCC) forwarded from the Madrid Conference of the Parties (COP).

Regarding programme robustness: While we recognize that all programmes have put forward different approaches and standards, we would like to emphasize that all standards and approaches should be consistently robust across the board, promoting a race to the top in terms of environmental quality, rather than providing a multiplicity of criteria with opportunities for projects/programmes to pick and choose the approach that has the loosest requirements. As a result, all programmes need to provide assurances of meeting certain key criteria, including similarly conservative baselines to demonstrate additionality and similar assurance of no double counting. We urge the TAB to consider the need to ensure that applicant offset programmes address baseline issues in a way that is standardized across programmes and consistent with best practices. Otherwise, CORSIA could end up approving different programmes that issue widely disparate amounts of credits for virtually identical activities in the same or similar locations within a single country. Such an outcome could create competitive distortions among airlines that use compliance credits from these different programmes.

Regarding activities (forests): We would also like to note that while our review is done on a programme basis, not an activity basis, we wish to underscore the important role of forests. The IPCC recently affirmed that "reducing deforestation and forest degradation rates represents one of the most effective and robust options for climate change mitigation, with large mitigation benefits globally." In fact, reducing deforestation and forest degradation can provide about one-third of the emissions reductions and sequestration needed to limit global temperature rise to below 2°C. Following the guidelines established by the COP to the UNFCCC in its Warsaw Framework for Reducing Emissions from Deforestation and forest Degradation (REDD+), which the COP, in Article 5 of the Paris Agreement, encouraged Parties to implement and support, we would like to highlight our strong endorsement of the inclusion and prioritization of large, jurisdictional scale (national or state/province level) REDD+ programmes under CORSIA. Jurisdictional REDD+ programmes could provide a secure supply of high-quality emissions units that can enable the aviation sector to meet its climate goals, a significant source of investment in forest protection, benefits to local communities and indigenous peoples, and sustainable development in developing countries.

In particular, high-integrity jurisdictional-scale crediting approaches present greater assurances of addressing the issues of additionality, reversals, leakage, and permanence compared to stand-alone project approaches. For example, a jurisdictional approach captures any shifts of emissions (i.e. leakage) that occurs within the boundary of the jurisdiction. A jurisdictional approach inherently reduces risks of large-scale reversals as it allows anticipated risks of reversals (e.g. from forest fires) to be incorporated into the baseline, as well as by pooling risks of reversal across all actors within the jurisdiction. Buffer requirements provide further assurances on top of this. In order to ensure environmental integrity and robustness of emissions reductions, it is imperative that all site-scale REDD+ activities or projects be "nested" as part of a national or subnational REDD+ programmes to have the same benefits of national level monitoring and accounting.

Regarding access to application materials: Lastly, we request that if programmes submit significant revisions to their applications or supplementary documentation, the revised applications and documents should be re-posted for public review and comment. We would like to reiterate our support for the EUC review process and thank the TAB for their work in ensuring CORSIA only allows high-integrity offsets into what has the potential to become the world's largest offset market.

Each of the organizations that has contributed to these comments is dedicated to combating climate change and ensuring that people and nature thrive. Recognizing the importance of forests to mitigating the impacts of climate change, our organizations have been instrumental in advancing forest action through our respective approaches and capacities, and individual staff members of our organizations work in their personal capacities to advance these aims as well. With respect to Environmental Defense Fund, Nathaniel Keohane, EDF's Senior Vice President for Climate, participated in a personal capacity as a board member of the Verified Carbon Standard (VCS) from 2015 to 2018 and was also a member of an Interim Steering Committee that worked with the ART Secretariat to help guide the development and establishment of ART in 2018. The role of the Interim Steering Committee ceased in 2019 with the establishment of an independent Board of Directors to govern ART. Additionally, Kelley Kizzier, EDF's Associate Vice President for International Climate, serves in her personal capacity as a member of the board of directors of Verra. As an investor into the Forest Carbon Partnership Facility (FCFP) Carbon Fund, The Nature Conservancy (TNC) has a vested interest in the programme's success. As such, TNC stepped back from review of the FCPF's application. Conservation International (CI) is a methodology proponent for the Joint Crediting Methodology (JCM) REDD+ methodology in Cambodia. The JCM REDD+ methodology was not part of the JCM's application to ICAO, which was solely focused on its bilateral programme with Mongolia.

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Programme Name	**Reference in Programme Application Form**	**Emissions Unit Criteria reference***	**Comment**
Architecture for REDD+ Transactions	Reviewers' overall summary:	In the TAB document made public in March 2020, the TAB helpfully provided additional context around what defines high-quality jurisdictional REDD+ programmes. **Based on this insight, and our understanding of the EUCs, we found that the Architecture for REDD+ Transactions (ART) conforms with all of the EUC requirements and is notable for its stringency in terms of its environmental criteria. In considering the conditions applied to REDD+ programmes assessed in the first TAB cycle (FCPF and VCS JNR), we also found that The REDD+ Environmental Excellency Standard (TREES), ART's standard which is consistent with UNFCCC decisions including the Paris Agreement, the Warsaw Framework and the Cancún Safeguards, fulfills those conditions.** We would, however, ask for greater clarity from ART in the future around the distinction between CORSIA-eligible programmes and non-CORISA-eligible programme monitoring requirements. Otherwise, we found that the ART requirements for avoiding double counting, setting conservative baselines, reducing leakage, and ensuring additionality, permanence and strong safeguards are all robust and uphold stringent standards for both environmental and social integrity. **ART is an outstanding example of a rigorous standard. Therefore, we strongly support the approval of ART under CORSIA.**	
	Question 4.1 (Paragraph 3.1)	EUC Additionality: "Carbon offset programmes must generate units that represent emissions reductions, avoidance, or	Baselines for REDD+ programmes are developed in line with rigorous UN guidance from which to measure results and demonstrate additionality. All countries engaging REDD+ must also develop a national REDD+ strategy to identify and address the drivers of deforestation that would have led to an increase in emissions if the REDD+ activities had not occurred. The ART programme further ensures additionality through a performance-based approach—whereby only emissions achieved below a recent 5-year historical

		removals that are additional"	reference-level baseline (i.e., the TREES Crediting Level) will be eligible for crediting—and thus meets the emissions unit criterion. Moreover, there is a requirement that all historical data be used within the reference period and that the crediting line to be readjusted downward over time. This ensures increasing ambition and provides strong assurance of additionality.
	Question 4.2 (Paragraph 4.2)	EUC Baseline: "Carbon offset credits must be based on a realistic and credible baseline"	REDD+ implementation is measured in the form of emissions and removals (in tons of CO2 equivalent) against a Forest Reference Emission Level (FREL), which must undergo a public and transparent technical assessment by the UN to assess the degree to which the information meets the guidance and to provide technical recommendations for adjustments or future improvements. Under TREES, a crediting level is developed to be even more conservative than the FREL, which requires ART verification that assesses uncertainty levels in the crediting calculations. There are prescriptive rules for the crediting line to be set at a five year historical average (no more than 4 years prior to the submission of the programme) and that require the crediting line to be recalculated every five years, with only downward adjustments possible. This ensures a highly conservative approach to setting the baseline that provides the greatest assurances of additionality, minimizing potential for using different methodologies that could yield a wide range of different credit numbers.
	Part 4 Question 4.5 (Paragraph 3.5.7)	EUC "Permanence"	The scale of REDD+ implementation, in line with national strategies, promotes the long-term sustainability and permanence of REDD+ emission reductions. REDD+ programmes have years of experience and guidance on measures to address any potential risk of reversals. For example, some REDD+ programmes, including ART, employ a buffer system (i.e., reserves of reductions which are not transferred but which can be accessed to compensate for any reversals). Through the application of this robust buffer approach, the ART programme addresses this EUC. Should an ART Participant choose to prematurely leave the programme, it is our understanding from the text that the Participant will still be responsible for ensuring CORSIA requirements continue to be met. For example: If a Participant

			leaves ART and **has** sold credits via CORSIA, the Participant must continue to commit to a twenty-year monitoring period (and thus account for any reversals). However, we note that this requirement could be made clearer in ART's application, and we request that the standard clarify this language so that the programme requirements are clearer to Participants. Additionally, ART notes that the buffer pool "is likely to be adequate." Once ART has Participants, it should consider running buffer pool stress tests like the Gold Standard mentioned in its application last year.
	Question 4.6	EUC Leakage: "A system must have measures in place to assess and mitigate incidences of material leakage"	The UN Framework for REDD+ safeguards against a potential increase in emissions elsewhere (i.e., leakage) by requiring the establishment of a national forest monitoring system and the preparation of national REDD+ strategies and action plans to address the drivers of deforestation and forest degradation, land tenure and forest governance issues, as well as reversals at the national or subnational scale. In addition, the ART programme mitigates leakage risk through sub-national leakage deductions.
	Question 4.7	EUC Double Counting: "Are only counted once towards a mitigation obligation"	TREES is notable for having put in place robust measures to avoid double counting in all forms, including double issuance, double use, and double claiming, with specific references to existing UNFCCC decisions. TREES expressly requires that countries must include emission reduction and removals from forests as part of their overall NDC target. Furthermore, in the event that a TREES Participant is not a national government, the national government must provide the Participant with a letter from the relevant national entity both authorizing the Participant's application to and participation in ART, and attesting that the national government will support the Participant by aligning accounting and reporting as required under the Paris Agreement and towards NDCs, including addressing the double counting provisions outlined in TREES Section 13. This includes an explicit requirement that, in the case of credits sold and transferred to an airline or other non-Party under UNFCCC, the host country provide a letter attesting to report the transfer to the UNFCCC in the structured

			summary of its biennial transparency reports (as referred to in paragraph 77, subparagraph (d) of the Annex to decision 18/CMA.1) and make an accounting adjustment as required by the UNFCCC. To mitigate the risk of double issuance, TREES requires the disclosure of any issued emission reductions in the same accounting area which will be deducted from TREES issuance volume, checks of duplicate registration under other programmes (including offset programmes) and requirements for disclosure of other registrations, as well as for cancellation of the units on one registry prior to reissuance on another. To prevent double use, TREES requires proof of ownership upon registration, tracking of ownership of credits within the registry by serial number and account, and an annual attestation of ownership and use. TREES also has a number of measures in place to prevent double claiming of emissions reductions by the host country and another Party toward Paris Agreement NDC targets, and by the host country and a non-Party for use toward mitigation obligations. Furthermore, TREES will incorporate relevant future decisions and guidance on accounting and reporting in the UNFCCC for the Paris Agreement and ICAO for CORSIA.
BioCarbon Fund Initiative for Sustainable Forest Landscapes	Reviewers' overall summary:	The BioCarbon Fund Initiative for Sustainable Forest Landscapes (ISFL) programme is similar to the FCPF, also managed by the World Bank. It seeks to include emission reductions from additional types of Agriculture, Forest and Other Land Use (AFOLU) mitigation activities to complement the mostly forestry emissions covered under the FCPF. We support the expansion of eligible, high-quality nature-based units. **The same legal structure that the World Bank provides FCPF answers the structural and longevity functions for ISFL, while the programme design also follows the FCPF structure which we found to generally meet the EUCs.** For example, by requiring proof of ability to transfer title, this programme also has a strong provision to eliminate double counting. However, as with our review of the FCPF, we would like to know additional details regarding any process of transferring from ISFL to another CORSIA-eligible Emission Unit Programme, which would be useful for assessing both the permanence and programme governance. The one other issue we still see is the	

		fact that the Transaction Registry is still undergoing an internal World Bank review process. Without seeing it in its final form it is hard for us to review it at this time.	
	Question 4.1 (Paragraph 3.1)	EUC Additionality: “Carbon offset programmes must generate units that represent emissions reductions, avoidance, or removals that are additional”	Additionality is met through the use of a conservative baseline represented as an average annual historical GHG emissions and removals of activities in the programme jurisdictions over a baseline period of 10 years. Hence, additionality is demonstrated in terms of the excess GHG reductions or removals relative to a conservative emissions baseline.
	Question 4.2 (Paragraph 4.2)	EUC Baseline: “Carbon offset credits must be based on a realistic and credible baseline”	The baselines are developed in line with the UNFCCC Warsaw Framework for REDD+ and IPCC Guidelines and Guidance on AFOLU. It considers historical deforestation rates and business as usual projections from which to measure results and demonstrate additionality. This meets the EUC criteria.
	Part 4 Question 4.5 (Paragraph 3.5.7)	EUC “Permanence”	ISFL employs a buffer system (i.e., reserves of reductions which are not transferred but which can be accessed to compensate for any reversals) which ranges from 10-40% depending on Participant risk. Additionally, ISFL guarantees that “Per Section 4.7 of the ISFL ER Programme Requirements and Sections 6, 7, 8 and 10 of the ISFL Buffer Requirements, reversal risk management policies and procedures of the ISFL can compensate material reversals during and beyond the ISFL term of 31 December 2030.” However, ISFL then claims that any reversals that may occur beyond 2030 will be managed by a CORSIA-eligible Emission Unit Programme “which administers comparable multi-decadal Programme elements in its scope of CORSIA eligibility and has in place a periodic monitoring and third-party Verification mechanism and ensure ER programmes are capable of monitoring for and compensation for material reversals for a period of at least 15 years following the

			end of the crediting period beyond the term of ISFL in 2030 (i.e. 31 December 2045)." It would be helpful to understand more details about how ISFL will ensure that any transition to another programme will ensure the use of similar permanence requirements.
	Question 3.7	EUC "Programme Governance"	Similar to FCPF, The ISFL is governed by the World Bank. In such, it uses established World Bank protocols for managing the programme globally, and in-country. The World Bank has long standing experience operating environmental programmes that we find high in quality. ISFL has in place a plan to transition any Participants wishing to participate in CORSIA from ISFL to a "CORSIA-eligible Emission Unit Programme" for any activities occurring beyond 2030. We would like to know if there are any additional specific terms and conditions for these long-term arrangements through either the framework or from country participants.
Cercarbono	Reviewers' overall summary:	The Cercarbono programme is a *"private voluntary carbon certification programme, which offers certification and registration of emissions of ex post compensation credits; by facilitating and guaranteeing individuals, companies and the public in general the registration of projects that generate removal or reduction of Greenhouse Gases (GHG) and the emission of carbon credits, called CARBONCER."* It was initially created in the Colombian tax context, as a certification programme for carbon tax offsets in the country. This programme relies on CDM methodologies, independently developed methodologies by third parties and Cercarbono's developed methodologies. It also allows methodologies recognized by the national government of Colombia (section 3.1). In Cercarbono's application, it is unclear if the programme has developed any methodologies of its own, although we note that they currently have an open public consultation for a new REDD+ project-level methodology. However, we would need to review Cercarbono's process before we could recommend the programme for CORSIA. Additionally, information is needed about the role of existing methodologies from other programmes, such as the use of CDM methodologies. It is unclear in Cercarbono's application whether the programme has additional requirements for use of a CDM methodology, or whether the	

		programme accepts any CDM-approved methodologies and projects. In the case of the latter, we need to see clear authority from Cercarbono over any future design or integrity decisions within its accepted methodologies. In general terms, this programme complies with some of the programme design elements. Regarding how the programme avoids double counting, issuance and claiming, the application explains that it does this through the certification protocol and the Ecoregistry Platform, which allows for issuance, tracking and withdrawal of all offset credits, to avoid double counting. However, it also mentions that there are no specific guidelines in place to address these matters (*Paragraph 2.11).* Also, according to the application, the programme would be operative in Latin America during the first three years, and has a long-term plan or 2030 visionto be involved in CORSIA to be able to reduce global emissions. **This programme appears to comply with some of the EUCs including additionality, baselines and permanence. However, although the application details the use of the registry to ensure that there is no double issuance or double claiming, it also explains that there are not any procedures in place to mitigate double emissions claims with units used under CORSIA at the moment. Until these and the other concerns listed above are addressed, we do not believe that Cercarbono sufficiently meets the EUCs.**	
	Question 4.1 (Paragraph 3.1)	EUC Additionality: “Carbon offset programmes must generate units that represent emissions reductions, avoidance, or removals that are additional”	The application mentions that all projects are required to demonstrate additionality and that verification bodies which carry out the validation and verification of the projects must verify, among other aspects, the additionality of the units. “*All projects are required to demonstrate additionality*” and the selected methods to assess it depend on the methodology that’s being applied to the specific project. Cercarbono’s application would appear to comply with the Emissions Unit Eligibility Unit Criteria (EUC) regarding additionality, since it establishes that all emissions reductions and removals are voluntary and it appears to have a system in place to assess such additionality.
	Question 4.2 (Paragraph 4.2)	EUC Baseline: “Carbon offset credits must be based on a	According to the application, this programme has measures in place to ensure that all units are based on a conservative baseline. Present and future conditions, existing and alternative types of projects and data availability must be considered when establishing the baselines under this programme; the validation

		realistic and credible baseline"	bodies must ensure that the baselines are complete and appropriate. Cercarbono's application would appear to comply with the EUC regarding baselines, since it assures it relies on conservative baselines that are verified and the criteria for these assessments by the validation bodies are set in the Programme's Protocol.
	Question 4.5	EUC: "Permanence"	According to the application, this programme has a buffer system in place to avoid possible reversals of GHG emissions, whereby if a project exceeds the 15% buffer, it must be adjusted at the next verification or accreditation period. Cercarbono's application would appear to comply with the EUC regarding permanence since it has a system in place to avoid eventual future reversals through mitigation measures to address and compensate for any risk of non-permanence.
	Question 4.7	EUC: "Are only counted once towards a mitigation obligation"	Although the application details the use of the registry to ensure that there is no double issuance or double claiming by registering all transfers and cancellations in the system, it also explains that: "At this time there are no established procedures for the mitigation of double claims associated with units used under CORSIA, but CERCARBONO will consider reviewing and adopting these procedures."
	Question 4.6	EUC Leakage: "A system must have measures in place to assess and mitigate incidences of material leakage"	This application identifies specific sectors where leakage could occur. The application states that the programme has procedures in place to monitor possible leakage, as set out in the approved methodologies. The verification bodies must assess if appropriate measures have been enforced and if they find leakage to be significant, they ensure that it is quantified and discounted from the credits from the specific project. Although this application selected "yes" in response to all sub-questions regarding leakage, the application elaborated in one of the commentary boxes that Cercarbono has no provisions in place for that sub-item. Clarification is needed.
	Question 3.10	EUC: "Sustainable Development Criteria"	This programme explains that information related to co-benefits and sustainable development is required for project proponents. Notwithstanding, it provides no specific information as to how these criteria will be used or assessed or if there

			will be any monitoring, reporting or verification, therefore it is unclear whether Cercarbono complies with the EUC regarding sustainable development.
Compte CO2	Reviewers' overall summary:	Compte CO2, created and administered by the French organization 450, is an emission units programme composed of methodologies and projects created by 450 and formerly approved by the French Government and under the Kyoto Protocol's Joint Implementation (JI) scheme. The programme, which is restricted to former JI track one and track two approved methodologies and projects, currently utilizes one methodology and does not anticipate approving new methodologies for the next three years or until current programme emission reduction units can be sold. Under the sole methodology used by Compte CO2, the scope of activities allowed under the programme includes the reduction of emissions from heating of buildings and from land transportation in France, which are both described in already approved JI methodologies. Credits are issued yearly based on real ex-post measurements and upon issuance of a verification report over a ten-year crediting period; additional issuance procedures information can be accessed publicly here. To track credits, the programme uses both its own electronic CO_2 accounting registry, known as the M1 registry, and the French section of the European Union emissions trading registry. "Should CORSIA manage to deal with the EU commission and to get CORSIA units allowed on this European Registry," Compte CO2 would continue to use this registry, but directive 2003/87/CE would need to be modified, which could be obtained according to Article 6 of the Paris Agreement. Rather than assign unique serial numbers to each unit generated, as reductions come from buildings and land transportation by equipment that are uniquely identifiable, internal procedures are used to check that each piece of equipment cannot receive credit for reductions more than once a year. **While the programme appears to comply with some EUCs, the programme's approach to avoiding double claiming and counting; identifying, assessing, mitigating, and compensating for reversal risks; assessing and mitigating potential leakage; performing validation and verification; disclosing and addressing conflicts of interest do not seem to comply with the EUCs.** Furthermore, when answering questions about programme design and offset integrity, the applicant simply stated that the "sole methodology approved by the programme" meets the criteria and referred to the external link to the UNFCCC JI approval documentation rather than explaining how the methodology meets the EUCs. The TAB should ensure that the methodology the programme is utilizing ensures the integrity of offsets for use within CORSIA.	

Joint Crediting Mechanism between Japan and Mongolia	Reviewers' overall summary:	Japan's Joint Crediting Mechanism (JCM) is a unique greenhouse gas programme in that the methodologies are adjusted for each bilateral deal between Japan and a partner country. As stated in their application, "JCM rules and guidelines discussed between Japan and Mongolia are adopted reflecting national circumstances, rules and regulations of Mongolia." The JCM put forward its bilateral programme with Mongolia focusing on three methodologies, (1) Installation of Solar PV Systems, (2) Replacement and Installation of High Efficiency Heat Only Boiler for Hot Water Supply Systems, and (3) Installation of Energy-saving Transmission Lines in the Mongolian Grid. Based on their application, the three proposed methodologies meet the majority of the EUCs; however, some of the questions in the application were not addressed, such as criteria related to the crediting period length and renewability, conflict resolution, material emissions leakage, and double counting. Regarding procedures defining the length of crediting period(s) and whether crediting periods are renewable, the JCM does not employ the concept of crediting period, but the concept of the operational lifetime of project, which is publicly available. In regard to the EUC on measures to assess and mitigate incidences of material leakage, the JCM application states that all GHG emissions attributable to the JCM project, inside and/or outside the project boundary, must be identified, and material emissions resulting from the implementation of JCM projects are assessed and calculated as project emissions. Lastly, regarding double counting, the application does not provide any procedures or decisions for attestations to ICAO, but plans to make them in the future. **Based on the JCM application for the programme between Japan and Mongolia, we have concerns whether all the EUCs were fulfilled.** However, the JCM is a credible programme with more than seven years of experience. We note that it would be appropriate for other bilateral JCM programmes to be put forward in the future for TAB consideration, including, for example, programmes utilizing the JCM REDD+ methodology,[1] provided that the EUCs are fully met.
Olkaria IV Geothermal Project	Reviewers' overall summary:	**The Olkaria IV Geothermal Project is an individual project and does not meet the requirements of a greenhouse gas programme or third-party standard. As the TAB is mandated to review GHG programmes and their related methodologies, the application for the individual Olkaria IV**

[1] Note: Conservation International is a methodology proponent for the JCM REDD+ methodology programme in Cambodia.

		Geothermal Project does not fall under the purview of the TAB review process. We note that Olkaria IV Geothermal Project is a project under the Clean Development Mechanism (CDM), which was approved by the ICAO Council subject to the conditions established, including start date and vintage limits.
Perform, Achieve, and Trade Scheme	Reviewers' overall summary:	**The Perform, Achieve, and Trade Scheme (PATS) is an energy savings certificate (ESCERT) scheme, not a carbon offset scheme.** The programme issues certificates in tonnes of oil equivalent for both new and old energy-intensive operations that exceed the unit-specific baseline. The programme is not in tonnes of CO2 or equivalent (tCO2e) and there is no current conversion established (though one is planned). **Because of these characteristics, many of the EUC criteria are incomplete or not fully met, such as a lack of clear methodologies, programme-specific safeguards, guarantee of long-term programme governance, etc.** Additionally, the programme application refers to "Annexure -2" which is missing from the Annex. We request that the TAB provide additional public review when this documentation becomes available, even after this public comment period has closed, as it is not possible to review a document that does not exist.
Regional Greenhouse Gas Initiative	Reviewers' overall summary:	The applicant is not the Regional Greenhouse Gas Initiative (RGGI) itself, but rather the Carbon Lighthouse Association, a non-profit that buys and retires allowances issued under cap-and-trade programmes. CLA's application tries to focus on RGGI-eligible offsets for which RGGI allowances have been issued, but the application does not clearly identify these pools of offsets. Rather it just refers the reader to RGGI programme weblinks, and those weblinks do not provide information about the offsets actually created in the individual state offset regulations, or about the baselines and additionality rules used by each state's regulatory framework. That raises the risk, as noted above, that different amounts of offsets could be issued by different state programmes in RGGI for the same activity. So, while in principle the retirement of RGGI-eligible offsets would provide very high integrity since each offset awarded an allowance under RGGI and then retired represents a reduction in the RGGI cap, it is unclear from the application what is the pool of offsets for which CLA seeks CORSIA approval and what the key elements of baselines and additionality are that undergird each. **Therefore, it is hard to see how this application could be approved without more information.** We hope that the applicant will be asked to provide this further information. In addition, we would welcome an exploration of how allowance programmes could be eligible under CORSIA in the future.

Forest Carbon Partnership Facility	Reviewers' overall summary:	**The revisions and updates the Forest Carbon Partnership Facility (FCPF) has made to the Validation and Verification Guidelines, Methodological Framework of the Carbon Fund (CF), and ER Programme Buffer Guidelines for the Carbon Fund address the recommendations made by the TAB.** In doing so, the FCPF now has standards, procedures, and requirements in place for the purposes of ensuring verification and validation by accredited third parties, and for monitoring for and compensation of material reversals during the post-Carbon Fund Emission Reductions Payment Agreement (ERPA) period. It would be helpful, however, if the FCPF could provide additional information about who will oversee the long-term governance and Reversal Management Mechanism of ER programmes during the post-Carbon Fund ERPA period, and how.	
	Section (a)	EUC "Validation and Verification procedures"	Following the TAB's recommendations, the FCPF, with support from the American National Standards Institute (ANSI) National Accreditation Board (ANAB), has revised and updated the Validation and Verification Guidelines (VVG) that apply to all ER programmes under the FCPF Carbon Fund that wish to generate CORSIA Eligible Emissions Units. The VVG now includes detailed standards, procedures, and requirements relating to verification *and* validation; in particular, per Section 12.2 of the VVG, the Final Validation Report shall include a Validation statement covering several aspects ranging from a "description of the activities undertaken as part of the Validation including the evidence-gathering procedures used to assess the GHG assertion" to an "overview of the findings of the Validation in relation to how the ER Programme meets the applicable criteria, including information on how any non-conformities were addressed" (see items a-f on pages 1 and 2 of application). In response to the TAB's recommendation that the FCPF put in "place standards and procedures providing for the validation of activities supported by the programme, by accredited third-parties and for such accredited third-parties to undertake validation of activities supported by the FCPF for those implementing participants that wish to generate CORSIA Eligible Emissions Units," the FCPF's updated VVG now states that validations will be conducted by third party Validation and Verification Bodies (VVBs) accredited under the International Organization for Standardization (ISO). ANAB, which helped revise the VVG as

			previously stated and is an Accreditation Body (AB) that is a signatory to the IAF Multilateral Recognition Arrangement for ISO standards, is the first AB to provide accreditation services under the FCPF Carbon Fund, to support the roll-out of the first accreditations, and to facilitate other AB to provide validation and verification services. ANABhas ensured that the updated VVG requirements conform to third-party audits in accordance with various ISO standards, particularly those related to Land Use and Forestry.
	Section (b)	EUC "Programme Governance"	To address the TAB's recommendations that procedures be put in place to ensure monitoring for and compensation of material reversals for a period of time that at the very least exceeds the period of time between when the programmes were assessed (2019) and the end of the CORSIA's implementation period (2037), the FCPF Carbon Fund adopted a Revised Methodological Framework of the Carbon Fund and Revised ER Programme Buffer Guidelines for the Carbon Fund. These additional governance arrangements are designed to ensure monitoring for and compensation of material reversals to assure permanence of emission reductions during the term of the Carbon Fund ERPA and for a period of up to 15 years beyond the term of the Carbon Fund ERPA for any ER programme(s) seeking to transition to a CORSIA Eligible Emissions Unit Programme. The revised Buffer Guidelines require that any ER Programme seeking to supply CORSIA Eligible Emissions Units must inform the Carbon Fund of their intention to transition to a CORSIA Eligible Emissions Unit Programme one year prior to the end of the Term of the CF ERPA and must have a Reversal Management Mechanism in place that "addresses the risk of Reversals beyond the Term of the CF ERPA; is equivalent to the ER Programme CF Buffer; and shall be continually managed and operated under a CORSIA Eligible Emissions Unit Programme." Furthermore, the Buffer Guidelines list specifications that the Reversal Management Mechanism must meet in order to be considered equivalent to the ER Programme Carbon Fund buffer, one of which is a "periodic monitoring and third-party verification mechanism for a period of at least 15 years following the end of the Crediting Period to confirm if

			there have been Reversals and makes monitoring and verification reports publicly available.” Considering that any ER Programme that wishes to generate CORSIA eligible emissions will need to transition to a CORSIA Eligible Emissions Unit Programme that will “monitor for reversals and have in place Reversal Management Mechanisms to compensate for material reversals for at least until 15 years following the end of Carbon Fund ERPA in 2025 (i.e. 31 December 2040),” it would be helpful if the FCPF could provide more information about how it is going to ensure that the applicable CORSIA Eligible Emissions Unit Programme to which CF ER Programmes might transition will properly oversee the Reversal Management Mechanisms, long-term governance of the ER Programme, and ensure the permanence of emissions reductions.
Verified Carbon Standard (managed by Verra)	Reviewers’ overall summary:	It has come to our attention that Verra provided critical supplemental materials to their application, which are not available on the ICAO website. For any future public consultations, we strongly encourage the TAB to provide the full list of application materials as this is needed to understand the proposal in full. **Verra has addressed the main concerns listed by the TAB review in early 2020. The programme has extended the crediting period for its Jurisdictional and Nested REDD+ (JNR) methodology and has provided additional criteria for projects to report on sustainable development.** Additionally, Verra has proposed a new solution to determine whether Verified Carbon Standard (VCS) certified projects and programmes, including from AFOLU activities, meet the EUCs, which seems to fit the current approach that the TAB has taken towards other standards. ***EDF-only comments:*** *EDF did not submit comments to the TAB in the first round of the VCS application so would like to take the opportunity to raise further points. In particular, the proposed approach by VCS to establishing baselines is overly flexible in providing jurisdictions with multiple options, including potential to exclude emissions from forest degradation, and consequently does not ensure additionality based on a realistic and credible baseline as required by the EUCs. This proposed flexibility is made more problematic by the proposed new minimum crediting period that could lock in baselines for 20*	

		years, without required increases in stringency over time. Before the TAB can approve the standard, it is important for Verra to address this issue with added safeguards to ensure additionality through an approach that constrains flexibility in establishing baselines and does not leave the judgment in the hands of the validation/verification bodies. We urge the TAB to ensure that different programmes approved for crediting are consistently robust to ensure environmental quality. (Added technical comments from EDF alone are provided below and identified with italics.)	
	Question 3.3. (Paragraph 2.3)	EUC "Offset credit issuance and retirement procedures"	Verra is "is in the process of updating the JNR Requirements to allow a minimum JNR programme crediting period of 20 years." This extension would meet the conditional eligibility requirements laid out by the TAB to allow JNR programmes to meet CORSIA-eligibility.
	Question 3.10	EUC "Sustainable Development Criteria"	The new VCS Sustainable Development Contributions Report will address the TAB requirement that "only VCS activities that report their Sustainable Development contributions & co-benefits in the course of applying the CCB Standards or SD VISta, or according to the default Sustainable Development criteria that the VCS clearly identifies for such use, can be identified as CORSIA Eligible Emissions Units in the Reserve registry system." Verra notes that it is in the process of creating a "VCS Sustainable Development Contributions Report." Ideally, there will be a public comment period for such a report, so the public can provide feedback on whether these criteria are robust.
	Question 4.5	EUC: "Permanence"	Verra's clarification about Afforestation, Reforestation and Restoration (ARR) projects utilizing CDM methodologies but abiding by additional VCS permanence rules should meet the TAB criteria for eligible methodologies.
	Question 4.6	EUC Leakage: "A system must have measures in place to assess and mitigate incidences of material leakage"	In their accompanying letter to the TAB, Verra proposed that a principled approach is taken in lieu of deciding whether specific methodologies are eligible under CORSIA. This approach would confirm that the project or programme has applied the relevant methodologies, sustainable development requirements and other conditions in order to meet the EUCs. After this assessment, the units would receive a "CORSIA label" that is transparently communicated in the Verra registry. This theory seems to fit the current approach that the TAB has taken towards other standards.

	Question 4.1 (Paragraph 3.1)	EUC Additionality: "Carbon offset programmes must generate units that represent emissions reductions, avoidance, or removals that are additional"	***EDF-only comments**: Additionality hinges critically on the approach to baselines. As described below, Verra's proposed approach is overly flexible and reliant on the review process and judgment of the validation/verification body such that it does not assure additionality.*
	Question 4.2 (Paragraph 4.2)	EUC Baseline: "Carbon offset credits must be based on a realistic and credible baseline"	***EDF-only comments**: According to the VCS JNR Requirements, the jurisdictional baseline shall be fixed for a period of 5 to 10 years as defined by the jurisdiction in the jurisdictional programme description, and shall be updated and revalidated according to such frequency. Deforestation activities need to be comprehensively accounted for, whereas inclusion of degradation emissions (and removals) is optional, even though degradation can be a significant source of emissions in many jurisdictions and is the largest source of emissions across tropical forests (Baccini et al. Science. 2017). A historical level of GHG emissions across the historical reference period shall be calculated for each selected activity and will form the basis of the baseline. However, the jurisdiction has several options for choosing the baseline. Where no baseline has been established under the UNFCCC for the purposes of crediting or compensation in market-based mechanisms, the jurisdiction has the ability to select either the most "plausible" jurisdictional baseline scenario or a scenario that is more conservative than the most plausible. The chosen scenario can be based on historical average emissions levels, a historical trend, or a modeled projection (upwards or downwards) of emissions. Moreover, the historical average can be based on either an 8 or 12 year period (according to the jurisdiction's choice) ending within 2 years of the current baseline period. Furthermore, the jurisdiction must use data for at least three points in time taken from a similar season within the historical reference period, but there is no requirement to use more data if that is available. Verra requires the jurisdiction to present more than one option and justify its approach and also requires review of the proposed approach by a JNR expert panel, as well as consideration of input from a public consultation process. While this provides opportunity for external oversight, this process still*

			leaves a lot of room for potential cherry picking of historical years, the length of the historical period, the modeling approaches, and the type of baseline, including using UNFCCC forest reference emissions levels (FRELs) which are not necessarily conservative. This flexibility in the standard ultimately leaves the judgment call in the hands of the validation/verification bodies. As a result, the proposed VCS approach does not provide assurance of meeting the EUC requirement for a "realistic and credible" baseline.
	Question 4.7	EUC: "Are only counted once towards a mitigation obligation"	***EDF-only comments****: While the VCS provides checks at the level of the registry to ensure units are not issued or transacted more than once, there are no requirements to ensure the host country provides authorization for the transfer of units and agrees not to count them towards NDCs or other mitigation obligations.*

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