

LINKING FORESTS AND FLIGHTS

Why forests are essential to global aviation's response to climate change

Emission reduction credits generated through forest carbon programs—which conserve and restore forests—can provide high quality and large-scale emissions units for airlines while protecting biodiversity and contributing to local livelihoods.

WHAT IS FOREST CARBON?

The world's standing forests act like a sponge that take in and store carbon from the atmosphere. This volume of stored "forest carbon" is 1.3 times larger than the amount of carbon stored in the world's fossil fuel reserves and is more than all of the carbon that has been released into the atmosphere since preindustrial times. Rampant deforestation and forest degradation around the globe is reducing the stocks of carbon stored by forests, accelerating the impacts of climate change.

"Reducing Emissions from Deforestation and forest Degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks" (collectively referred to as REDD+) is a framework developed under the United Nations (UN) to drive down emissions from deforestation in developing countries by helping society fund demonstrated results in terms of the large-scale protection of forests for their carbon sequestration and storage.

HOW FORESTS CAN CONTRIBUTE TO AVIATION'S CLIMATE GOALS

Including REDD+ as an eligible offset type under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), provides a triple benefit:

- ✓ a secure supply of high-quality offsets that can help the aviation sector meet its climate goals,
- √ significant investment in forest protection, and
- √ benefits to indigenous peoples, local communities and developing countries.



¹ Federici, S., Lee, D., and Herold M. (2018) "Forest Mitigation: A Permanent Contribution to the Paris Agreement". http://www.climateandlanduse alliance.org/wp-content/uploads/2018/12/Forest-Mitigation-a-Permanent-Contribution-to-the-Paris-Agreement-1.pdf.

DO REDD+ CREDITS MEET THE CORSIA EMISSIONS UNIT ELIGIBILITY CRITERIA?

In March 2019, the ICAO Council adopted a set of "CORSIA Emissions Unit Eligibility Criteria (EUC)" against which carbon offset programs will be assessed for approval to supply the international aviation market. See below for an explanation of how REDD+ units meet the EUCs.

- 1 Are REDD+ units "additional"?
- **YES:** Baselines for REDD+ programs are developed in line with UN guidance that rigorously requires a national or subnational scale accounting framework from which to measure results and demonstrate additionality. Such large-scale accounting in combination with conservative baselines provides assurance that emissions reductions are additional. All countries engaging in 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.
- 2 Are REDD+ units based on realistic and credible baselines?
- **YES:** REDD+ implementation is measured in the form of emissions and removals (in tons of CO₂ equivalent) against a Forest Reference Emission Level that should be transparently established, taking into account historical data and adjusting for national circumstances in accordance with UN decisions. This reference level 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. Best-in-class REDD+ standards provide further requirements for ensuring conservative baselines at national and/or subnational levels.
- 3 Are REDD+ units quantified, monitored, reported and verified?
- **YES:** The UN Framework for REDD+ requires national governments to establish robust national forest monitoring systems for measuring, reporting and verifying forest-related emissions and removals at the national and/or subnational levels.
- 4 Do REDD+ units have a clear and transparent chain of custody?
- **YES:** While individual REDD+ programs have established their own chain of custody procedures, UN decisions provide an additional layer of assurance by mandating that REDD+ programs report information to the *Lima REDD+ Information Hub*, which provides a registry for REDD+ results, including information on associated results-based payments.
- 5 Are REDD+ units "permanent"?
- YES: The large scale of REDD+ implementation, in line with national strategies, promotes the long-term sustainability and permanence of REDD+ emission reductions. REDD+ programs have years of experience and guidance on measures to address any potential risk of reversals. For example, some REDD+ programs employ a buffer system (i.e., reserves of reductions which are not transferred but which can be accessed to compensate for any reversals).
- 6 Do REDD+ units safeguard against a potential increase in emissions elsewhere?
- **YES:** The UN Framework for REDD+ safeguards against a potential increase in emissions elsewhere (known as leakage) by accounting for results at large national and subnational scales, 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.
- 7 Are REDD+ units only counted once towards a mitigation obligation?
- **YES:** Like all offset types, REDD+ units must be transparently recorded in a registry and be subject to additional provisions to ensure no double counting of emission reductions, including double issuance, use and sale. Additionally, UN decisions require that REDD+ results be recorded in the *Lima REDD+ Information Hub*, thus providing a mechanism to ensure that all REDD+ results, including those transferred to CORSIA can be identified and tracked against national progress under the Paris Agreement.
- 8 Can REDD+ programs demonstrate that they do no harm?
- **YES:** All REDD+ programs must follow local laws and regulations, UN REDD+ safeguards, and additional operational rules from offset programs. These safeguards go beyond the principle of "do no net harm," by including a requirement to employ a redress mechanism to address any grievances filed by from individuals or communities. REDD+ programs must report on the implementation of all safeguards to receive credit for reduced deforestation results.

ARE ALL OFFSET PROGRAMS EQUAL?

No. Strong governance at the offset program level is necessary to ensure the integrity of these units (e.g., that they meet the legal requirements, have clear methodologies and protocols, and have systems to ensure that units are not double counted). In the context of REDD+, high-integrity jurisdictional-level (national or state/province) crediting approaches, including nested REDD+ activities, present greater assurances of addressing the issues of additionality, reversals, leakage and permanence. For further details see our assessment of the greenhouse gas program applications submitted in 2019 and 2020 as part of the public comment periods.^{2,3,4}

HOW ONE AIRLINE IS ALREADY SUPPORTING FOREST CONSERVATION

As part of its Eco-Skies CarbonChoice program, <u>United Airlines</u> offers customers the opportunity to support a forest carbon initiative in Peru that establishes conservation agreements with local farmers, who receive services such as technical training in return for not cutting down the forest.

Through the Alto Mayo REDD+ program in Peru, deforestation rates have reduced by 75% since 2010, reducing estimated emissions by more than 6.6 million metric tons—the equivalent of taking more than 1.4 million cars off of the road for one year.

In addition to delivering verified emission reductions, this REDD+ program has also helped protect the unique biodiversity of the region (including more than 300 orchid species and 330 bird species) and provided more than 466 local jobs.



WHY LINK FORESTS AND FLIGHTS?

Nature offers at least 30% of the solution to climate change but currently receives less than 3% of climate-related funding. That needs to change if we are going to avoid the worst impacts of climate change. Offsets generated through the conservation and restoration of forests can provide high quality emissions for airlines while protecting biodiversity, maintaining ecosystem services and contributing to local livelihoods.

In March 2020, the ICAO Council made history in approving its first set of greenhouse gas programs deemed eligible for airlines to purchase in meeting their climate goals, several of which include nature-based solutions. With this decision, CORSIA became the first *global* carbon market to accept nature-based credits. When it comes to forest credits under the UN's Reducing Emissions from Deforestation and forest Degradation framework (known as REDD+) specifically, the Council conditionally approved two REDD+ offset standards, creating a pathway for their inclusion upon meeting these conditions.

In November, the ICAO Council has another opportunity to make history by including high-quality, REDD+ programs under CORSIA. We call on the ICAO Council to support high-quality REDD+ programs that meet the Emissions Unit Criteria.

² Conservation International. (2019) Public Comment on ICAO Emissions Unit Program Review. First Application Period. https://www.conservation.org/docs/default-source/publication-pdfs/public_comment_on_icao_emissions_units_criteria_program_review.pdf.

³ Conservation International. (2020) Public Comment on ICAO Emissions Unit Program Review: Second Application Period. https://www.conservation.org/docs/default-source/publication-pdfs/conservation-international-icao-public-comment-june-2020.pdf.

⁴ Environmental Defense Fund. (2020) Public Comment on ICAO Emissions Unit Program Review: Second Application Period. https://www.edf.org/sites/default/files/documents/EDF_TAB%20Public%20Comment_FINAL.pdf.