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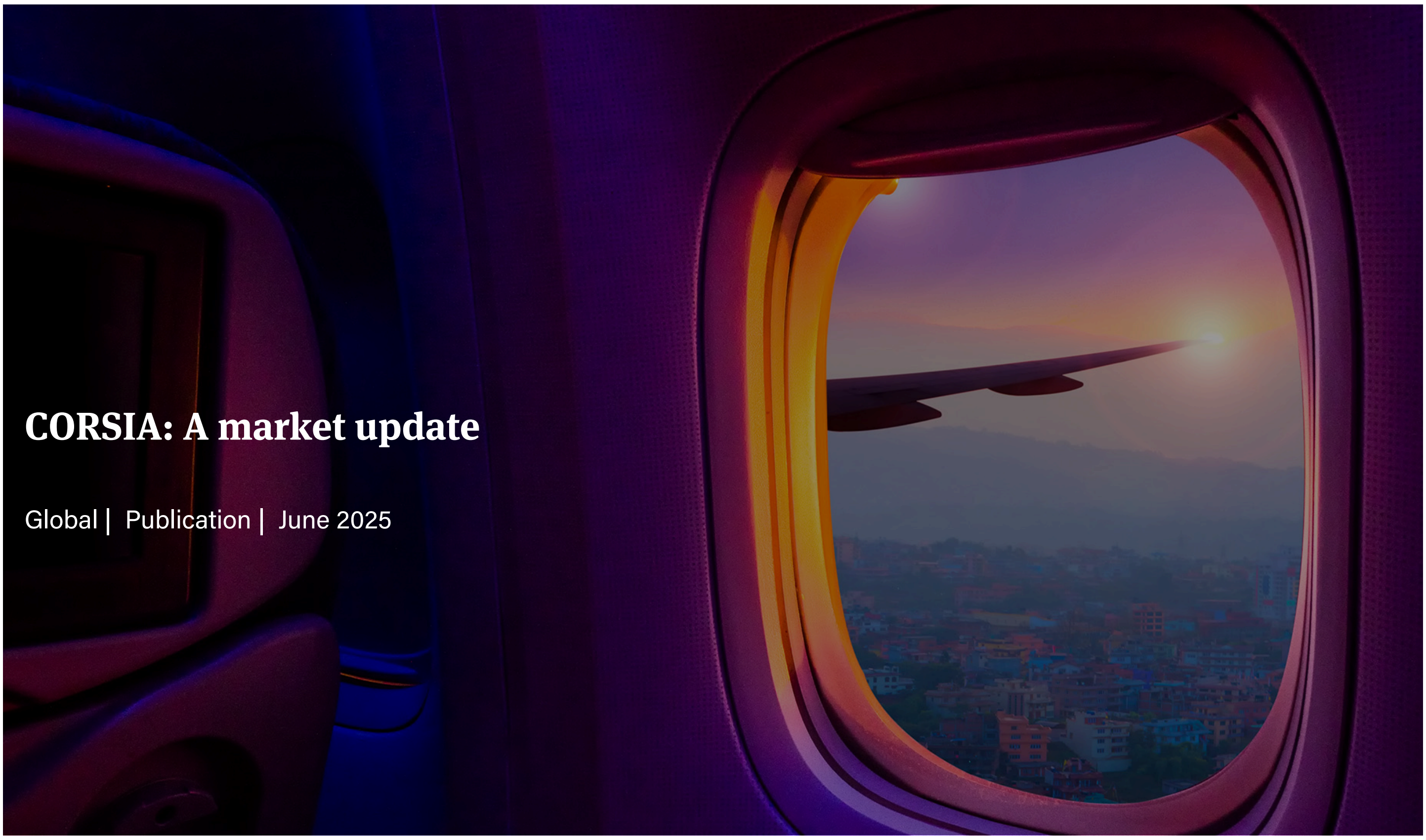

CORSIA: A market update

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The Carbon Offsetting and Reduction Scheme for International Aviation (**CORSIA**) is now half way through its first phase of compliance, while the supporting regulatory frameworks constituting the building blocks for the CORSIA and Article 6 markets are incrementally being cemented in place and the market is developing fair mechanisms for managing key gap risks.

Global emissions remained below the CORSIA baseline for the pilot phase, resulting in no offsetting obligations. However, with likely demand significantly outstripping current supply, airlines who are covered by the first phase of CORSIA will need to consider how they position themselves for compliance. This update considers what units are eligible for compliance, as well as the predicted demand and supply dynamics.

Content

Refresher: What is CORSIA?

CORSIA is the International Civil Aviation Organization's (**ICAO**) market-based measure scheme aimed at addressing carbon emissions from international aviation. It operates in the context of the ICAO resolution passed in October 2022, which committed the international aviation sector to achieve net zero carbon emissions by 2050.

Under CORSIA, aeroplane operators of certain international flights are required to offset any increase in their emissions above a 2019 baseline level by purchasing and surrendering eligible carbon credits, known as CORSIA Eligible Emissions Units (**CEEUs**). Purchasing CEEUs may be complemented with an airline's use of sustainable aviation fuel (**SAF**)[1].

CORSIA is being implemented in phases, following the completion of the pilot phase. The first formal phase of the scheme began on January 1, 2024 and will conclude on December 31, 2026 (**First Phase**). Although the First Phase is not mandatory, 129 ICAO member states are currently participating in it. The second phase, which will run from January 1, 2027 to December 31, 2035 (**Second Phase**), is mandatory (with limited exceptions) for all ICAO member states, of which there are currently 193.

Countries are now beginning to implement CORSIA obligations into their domestic legislation, with the UK government recently issuing draft legislation which will apply CORSIA obligations to aircraft operators in the UK. Other countries, such as Brazil, Canada and New Zealand have also introduced new, or amended existing, legislation to implement the CORSIA requirements.

Which routes does it apply to?

CORSIA applies to international flights only. Because the scheme takes a route-based approach during the pilot phase and First Phase, the monitoring, reporting and verification (**MRV**) and offsetting obligations will apply to aircraft operators flying between volunteering states, irrespective of where they are registered. This means that even states not participating in the First Phase of CORSIA must require their aircraft operators to comply with the scheme by reporting and offsetting their emissions on relevant flights.

However, because CORSIA applies only to routes which both depart from and terminate in participating states, any flight to a non-participating state would **not** be required to offset even where it had departed from a participating state and vice versa. This makes the non-participation in the First Phase of five notable states - China, Russia, India, Brazil and Vietnam – significant.

Flights to or from non-participating states as well as flights between two non-participating states are however still subject to simplified reporting requirements.

Compliance obligations

Those airlines domiciled in countries that have committed to participate in the First Phase will be starting to consider their compliance obligations, given that we are now almost half way through the first compliance period.

The formal requirement is for sufficient CEEUs to be cancelled to offset the carbon emissions covered by the First Phase (**Offset Requirement**).

This emissions amount will be determined based on a sectoral approach, whereby ICAO will calculate on an annual basis the "sector's growth factor" (**SGF**). The operator will then need to multiply its total CO_2 emissions (covered by CORSIA) with the relevant SGF. At present, each relevant SGF has been zero, primarily due to the impacts on the aviation sector from COVID.

The deadline for achieving the Offset Requirement for the First Phase is January 31, 2028 (the **First Phase Deadline**), although it is possible to cancel CEEUs on a more regular basis (i.e. annually once the SGF has been published).

Although the formal compliance deadline is still some time away, airlines should be considering their procurement strategy for securing the required volume of CEEUs. This is particularly important, given the nascent state of the market in terms of availability of CEEUs.

Demand and supply dynamics

Projections of the demand for CEEUs have varied between organisations, ranging from between 100 and 182 million units for the First Phase, and between 502 million and 1.6 billion units for the Second Phase:

- According to the ICAO's latest projections from March 2025, demand for CEEUs could range between 100-150 million units for the First Phase, and between 980 million and 1.5 billion units during the Second Phase.

- International Air Transport Association's (**IATA**) most recent projections, dated September 2024, predict demand for CEEUs in the First Phase will lie between 107-161 million units.
- Abatable has estimated demand of between 135-182 million units for the First Phase and between 825 million and 1.6 billion units for the Second Phase.
- MSCI estimates a demand of between 106-137 million units for the First Phase, and between 502 million and 1.3 billion units for the Second Phase.

With such high projected demand for CEEUs, supply of CEEUs will need to significantly increase before the First Phase Deadline. Currently, there is only one approved project in the world which has achieved the milestone of CEEU issuance, which is a Jurisdictional REDD+ project being conducted under the ART program in Guyana.

Between October 28 and November 29, 2024, the first large-scale sale of CEEUs from the Guyana project took place on the Aviation Carbon Exchange, facilitated by IATA and Xpansiv. 32 airlines participated in the auction, with 11 airlines ultimately making purchases at $US 21.70 per unit. Future procurement events are expected to be held quarterly on the Aviation Carbon Exchange throughout 2025 (although to date we are not aware of any auctions being scheduled).

Other projects, including KOKO Networks Limited's bio-ethanol cookstoves project in Kenya and DelAgua's clean cookstove projects in Rwanda, the Gambia and Sierra Leone, are anticipated to issue eligible CEEUs under Gold Standard and Verified Carbon Standard, respectively, in the near future.

Unit eligibility

The ICAO has set specific criteria for carbon credit units to be eligible for CORSIA, including design requirements and integrity assessment criteria[2]. ICAO has so far approved six carbon credit programs as meeting these eligibility requirements for the First Phase. The CEEUs must cover emissions reductions that occur between 1 January 2021 to 31 December 2026 (being the end of the First Phase). Within the programs, certain activity types and methodologies have been excluded from eligibility, as per the below.

Program	Scope of eligibility
1. American Carbon Registry (**ACR**)	• Relevant units are ACR Emissions Reduction Tonnes. Excluded units, projects and activities: • California and Washington Registry Offset Credits (**ROCs**); • California Early Action Offset Credits (**EAOCs**); • ERTs issued to all activities that are developed in REDD+ countries **and** utilise methodologies in the programme's Sectoral Scope 3 (Land Use, Land Use Change and Forestry) category **and** generate more than 7,000 ERTs annually.
2. Architecture for REDD+ Transactions (**ART**)	• Relevant units are ART credits.

3. Climate Action Reserve (**CAR**)	• Relevant units are Climate Reserve Tonnes (**CRTs**). Excluded units, projects and activities: • CRTs issued to activities that have not reported their sustainable development contributions or co-benefits, according to criteria identified in the Reserve's Program Manual; • Forecast Mitigation Units (**FMUs**) credited under the Climate Forward program; • ROCS; • EAOCs; • CRTs issued to all activities that are developed in REDD+ countries **and** utilise methodologies in the AFOLU categories **and** generate more than 7,000 CRTs, with the allowable exception of activities that utilisethe Reserve's Mexico Forest Protocol; • CRTs issued to activities that have a material risk of reversals and have been exempted from the Reserve's buffer pool contribution requirement; • CRTs issued to activities within the category of natural climate solutions that have a material risk of reversals and for which procedures to monitor, mitigate and compensate for reversals are required for less than 20 years; • Unverified emissions reductions.
4. Global Carbon Council (**GCC**)	• Relevant units are Approved Carbon Credits (**ACCs**). Excluded units, projects and activities: • ACCs issued to nuclear energy, HFC-23 abatement, Reducing Emissions from Deforestation and Degradation (**REDD**), Afforestation and Reforestation (**A&R**), and Carbon Capture & Storage (**CCS**) projects; • ACCs issued to activities involving grid-connected renewable electricity generation/supply that have a maximum output capacity of more than 15 MW.
5. The Gold Standard (**GS**)	• Relevant units are the Gold Standard verified emissions reductions (**VERs**). • The GS has released guidelines on labelling VERs for CORSIA. Excluded units, projects and activities: • Planned Emissions Reductions (**PERs**); • Unverified micro-scale activities; • VERs issued to all activities that are developed in REDD+ countries **and** utilise methodologies in the programme's Land Use and Forestry & Agriculture categories **and** generate more than 7,000 VERs annually, with the allowable exemptions for activities that utilise methodologies in the Soil Organic Carbon, Agriculture, and Livestock categories; • VERs issued to activities involving grid-connected renewable electricity generation/supply that have a maximum output capacity of more than 15 MW; • VERs issued to all activities that utilise methodologies in the Engineered Removals category.

6. Verified Carbon Standard (**VCS**) (**Verra**)	• Relevant units are Verified Carbon Units (**VCUs**). • Verra have released guidance on labelling VCUs for CORSIA. Excluded units, projects and activities: • EAOCs; • ROCs; • VCUs issued to activities that have not reported their sustainable development contributions or co-benefits per the relevant standards or criteria; • VCUs issued to activities involving grid-connected renewable electricity generation/supply that have a maximum output capacity of more than 15 MW; • VCUs that utilise methodologies AMS-II.G and/or VMR0006, or activities from Sectoral Scope 16; • VCUs issued to project-level activities that are developed in REDD+ countries **and** utilise methodologies from the programme's Sectoral Scope 14 **and** generate more than 7,000 VCUs annually, with the allowable exemptions from: — project-level activities under Scenario 2a or VCUs issued under Scenario 3 of the VCS JNR framework; — project-level activities under VM0012, VM0017, VM0021, VM0022, VM0024, VM0026 (and VMD0040), VM0032, VM0033, VM0036, VM0041, VM0042.

Host country letter of authorisation

A key element of a CEEU is that it can only be counted once towards a mitigation obligation. This is underpinned by a requirement that a host country provides an attestation of their intention to avoid double-claiming of the emission reductions or removals and applies a corresponding adjustment to ensure this, so ensuring that the emission reduction or removal represented by the CEEU is not claimed towards the host country's own Paris Agreement targets.

The host government is required to formalise its commitment to making a corresponding adjustment by issuing a letter of authorisation to the project developer in accordance with Article 6 of the Paris Agreement.

For the First Phase of CORSIA, CEEUs will need to be accompanied with a letter of authorisation from the project's host government together with either:

- evidence of application of a corresponding adjustment; or
- if it has not yet been applied, additional documentation backstopping this risk in the form required by the relevant registry (with requirements varying between carbon standards as they each align their procedures with ICAO's requirements, as further set out below).

If the CEEU can satisfy this criteria, then it will be tagged or labelled as 'CORSIA eligible.'

Guidance issued by IATA in November 2024 provides greater clarity on the relevant requirements, stating:

Host countries must:

- ensure they satisfy the prerequisites to participate in Article 6 cooperative approaches,
- issue attestations towards ITMOs [Internationally Transferred Mitigation Outcomes] being claimed as CORSIA EEUs by aircraft operators, and
- apply corresponding adjustments to reflect those transfers, and finally track and report them.

The role of insurance

The fact that the First Phase is dependent on host governments applying corresponding adjustments brings in an additional layer of risk that project stakeholders may not be willing or able to fully mitigate. Given the time lapse between the issuance of the letter of authorisation and the submission of the Biennial Transparency Report by the host government to the UNFCCC evidencing that it has made corresponding adjustments which are traceable to the CEEUs, this is an area of risk in respect of which insurance plays a crucial role.

Where the corresponding adjustment is not already made at the time of issuance, the carbon standards may require the provision of a backstop that, if the CEEUs are retired for the First Phase but the host government either revokes the letter of authorisation or breaches the letter of authorisation by not applying a corresponding adjustment, the affected CEEUs will be replaced with an equivalent volume of CEEUs.

An example of this is that the Gold Standard requires a deed of undertaking from the developer that it will replace the affected CEEUs, and evidence that the developer holds an approved insurance policy backstopping this undertaking. Currently the only Gold Standard approved insurance policy is the political risk insurance policy for breach of contract cover provided by the Multilateral Guarantee Agency (**MIGA**) which covers the risk of a government breaching its host government agreement obligations to issue letter of authorisation and apply corresponding adjustments. This therefore means that the project would need to be in a jurisdiction and of a type for which MIGA would provide cover, and would need to have an enforceable host government agreement.

Verra similarly requires a CORSIA accounting representation signed by the developer where it commits to replace the affected CEEUs and a certificate of insurance from a Verra-approved risk insurance product.

What next?

Given the currently limited supply of CEEUs (having regard to the predicted demand), airlines covered by the First Phase will be considering their procurement options. Procurement may be either undertaken directly from projects or through intermediary organisations (such as the Aviation Carbon Exchange). There will be a balance between the need to secure a long term offtake under a fixed price, versus the need to diversify and balance risk between projects. Issues such as delivery failure or project under-generation of CEEUs will become particularly important, together with failure or delay by the project host governments in making corresponding adjustments.

If you would like advice on your procurement options, and how best to prepare for future compliance obligations, or for any other CORSIA or carbon insurance related aspects, please contact us.

The authors would like to acknowledge the contributions to this article by Liam Mackay.

Footnotes

[1] Further information about SAF can be found here: How will the industry meet the demand for sustainable aviation fuel? | Global law firm | Norton Rose Fulbright and here: Sustainable aviation fuel: A transition pathway for aviation? | Australia | Global law firm | Norton Rose Fulbright

[2] ICAO document, CORSIA Emissions Unit Eligibility Criteria, March 2019

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