Reconciling CORSIA and the Sustainable Development Mechanism

AUGUST 2018
Executive Summary

The Paris Agreement breaks away from the division of “developed” vs. “developing” countries which was enshrined in the Kyoto Protocol. It sets a new dynamic which will inevitably impact the next generation of carbon markets.

It further sets new objectives for these mechanisms, such as contributing to overall mitigation of global GHG emissions and fostering sustainable development, while avoiding double counting of achieved reductions. To design a coherent set of rules which supports these objectives, a single mechanism under Article 6 needs to be established.

This mechanism -currently referred to as the Sustainable Development Mechanism (SDM)- should support a move beyond the concept of carbon offsetting and incentivise real domestic climate action for all countries by establishing a system for results-based climate finance under which mitigation outcomes are not claimed to meet emissions reductions targets, but rather are bought and counted towards climate finance transfer commitments.

However, with the aviation sector having already committed to using mitigation outcomes to offset part of its emissions, the new mechanism for international transfers will need to be designed in a way which incentivizes the transition of all sectors away from offsetting.

To this effect, the present briefing suggests the introduction of a ratchet mechanism on the scope of nationally determined contributions (NDC) which progressively phases out offsetting while expanding NDC coverage to all sectors of the economy.

Note: A technical summary of recommendations can be found at the end of this briefing.

Key recommendations:

- The SDM should be established as a mechanism for results-based climate finance and include provisions to phase out offsetting in all sectors, including aviation
- A 50% discount rate should be applied to all mitigation outcomes which continue to be used as offsets by airlines in order to achieve overall mitigation in global emissions
- Corresponding adjustments should be carried out by the host country for all offsets which are claimed by airlines, and a transparent international registry should be set up and made publicly accessible to avoid double counting
- Lessons should be drawn from the CDM to include local stakeholder consultation rules, a grievance mechanism, and technology restrictions to avoid adverse impacts
Introduction

The Paris Agreement sets up a new landscape for international climate policy. It puts an end to the “developed vs developing” dichotomy which underlined the Kyoto Protocol, and instead creates a bottom up world where each participating country agrees to a specific climate target.

The new mechanism for the transfer of mitigation outcomes, set up under article 6 of the Agreement, needs to therefore function in a way which is radically different from its predecessors, most notably the Clean Development Mechanism. Key requirements set under Article 6 of the Paris Agreement include the need to contribute to overall mitigation of global GHG emissions, and foster sustainable development, while avoiding double counting of emissions reductions.

While these objectives are referred to in different paragraphs of Article 6, the most sensible approach is to create a single mechanism in line with all of them, rather than set up an artificial distinction through multiple market-based mechanisms. For the sake of clarity, the rest of this briefing therefore refers to the “Sustainable Development Mechanism” (SDM) as a unified system for the international transfer of mitigation outcomes, combining both mechanisms which are sometimes distinguished from each other as articles 6.4 and 6.2.

To be effective, this new system should be characterized by a transition away from offsetting, towards a mechanism for results-based climate finance (RBCF), under which “RBCF units” would not be claimed towards mitigation objectives but rather cancelled and used towards meeting climate finance objectives.

However, the aviation sector has already planned to rely heavily on international offset credits in the medium term in order to meet its climate objectives, and this threatens the integrity of the new system by opening the door to double counting and perpetuating the potentially harmful practice of offsetting. Rules under article 6 of the Paris agreement must therefore be designed in a way which prevents the aviation sector from undermining national objectives, and contributes to a full and economy-wide phase-out of offsetting.

This briefing focuses on key design measures to regulate the use of mitigation outcomes when they are claimed as offsets under the aviation’s mechanism, notwithstanding the fact that all other actors outside of the aviation sector should use the SDM as a mechanism for RBCF.

Glossary

Given the importance of the difference between offsetting and RBCF, a clear distinction must be made between RBCF units which are cancelled by countries under an RBCF system, and offset credits which are used as offsets by airlines. In this briefing, we therefore use the following terminology:

- **Mitigation outcome (“MO”):** An emission reduction of 1 tonne of CO2e, recorded through a digital certificate. This emission reduction can become an offset credit or an RBCF unit depending on the purpose for which it is being sold and used.
- **Offset credit (“offset”):** A mitigation outcome which is claimed towards meeting an emission reduction objective.
- **RBCF unit (“unit”):** A mitigation outcome which is cancelled rather than claimed towards an emission reduction objective, and where the funds used to acquire the unit are counted towards a climate finance objective.

1 For more information on this, see our briefings “Good-bye Kyoto: transitioning away from offsetting post 2020” and “Building blocks for a robust Sustainable Development Mechanism”.
Aviation’s time-bound reliance on offsetting

The international Civil Aviation Organization agreed in 2016 to set up a new offsetting mechanism to compensate the growth in aviation emissions post-2020. To meet requirements under this new mechanism, called the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), airlines will purchase offsets from international schemes.

While the SDM moves away from offsetting, it is still likely to serve as a source of supply for offset credits to the aviation sector. However, this must only be a short-term, transitory arrangement, and the new mechanism for the international transfer of mitigation outcomes must include provisions to progressively phase-out offsetting from all sectors, including aviation.

Adopt an offset-free climate strategy for the aviation sector.

Phase out offsetting for aviation after 2030

Given the reality of the aviation sector’s short term reliance on offsetting, the SDM should contribute to a transition away from offsetting for all sectors. For this, it needs to be designed with a progressive ratchet mechanism on NDC scope, as shown on the diagram below. This would apply to all credits issued to be sold as offsets, while RBCF units would remain exempt. Under this system, activities are eligible to issue offsets if they are located inside a country’s NDC, and only for the duration of maximum one commitment period (of maximum 5 years, with the possibility of updating NDCs sooner). Countries are encouraged to implement emissions reductions activities in sectors outside of their NDC scope, but initially cannot issue offsets from these projects. Once the sector gets included inside the country’s NDC, it can start issuing offsets, until the NDC is expanded again.

To avoid setting a perverse incentive against adopting economy-wide NDCs before 2030, countries which adopt economy-wide NDCs before 2030 would be allowed to issue offsets from all sectors, until 2030.

This mechanism will encourage countries to implement emission reductions projects outside of NDC scope, in order to build capacity before expanding their NDC and starting to issue offsets from their activities. At the same time, it encourages countries to expand their NDC scope, in order to open new sectors to the possibility of issuing offsets. Finally, this system would smoothly and predictably transition Article 6 to a system with no offsets, which will inevitably happen once all countries adopt economy-wide targets representing the most ambitious climate commitment they can achieve, as suggested in the Paris Agreement.

Simple labelling of mitigation outcomes which meet these requirements would make it easy to distinguish between those which can be used as offsets outside of the UNFCCC, and those which can only be used under an RBCF mechanism.

Set up a ratchet mechanism on NDC scope and only allow the issuance of offsets to aviation from sectors newly covered by an NDC.
Environmental integrity and the need to phase-out offsetting

The lack of environmental integrity in offsetting mechanisms is a primary reason for justifying the shift towards an RBCF system.

Under the CDM, the lack of additionality of offset credits has crippled the effectiveness of the scheme. Additionality requires that the emissions reduced by a project be additional to 1) what had to be reduced in order to meet the NDC target, and 2) what would have happened (been reduced) under a BAU scenario.

Meeting the two additionality conditions

Note: Both graphs show the same thing, in two different ways. To be additional, credits must correspond to emissions reductions achieved beyond a country’s NDC and beyond that country’s BAU trajectory.

In practice, assessing the additionality of a specific project against BAU is extremely difficult, and sometimes impossible, due to the range of assumptions which must be made before a BAU trajectory can be estimated. The definition of a sufficiently stringent BAU baseline is beyond the scope of this briefing, but the difficulty of doing so is a major reason underlying the need to move away from offsetting systems and towards RBCF. By accounting only for the emissions actually reduced, rather than artificial measures through offset credits, an RBCF system would overcome the risk of undermining mitigation objectives when BAU baselines are set at inappropriate levels.

In addition to overcoming the problem of additionality, the below table summarizes the benefits of setting up an RBCF mechanism versus offsetting.

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<th>Offsetting</th>
<th>RBCF</th>
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<tr>
<td>Impact on the carbon price</td>
<td>Ties the price of carbon to the cheapest and lowest quality offsets</td>
<td>Is not tied to the price of carbon, and helps identify the lowest cost of real emission reductions</td>
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<td>Impact on climate ambition</td>
<td>Junk credits lead to an overall increase in emissions compared to a scenario where targets are met without using offsets.</td>
<td>Junk units reduce the impact of the finance provided, but do not affect a country’s achievement of its mitigation objective.</td>
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<td>Impact in host country</td>
<td>Sets a negative incentive for host countries to adopt lower climate targets in order to sell more credits</td>
<td>Supports ambition in host countries by contributing to their mitigation objective, thus freeing up budget for increasing ambition.</td>
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<td>Impact in the “buyer” country</td>
<td>Reduces efforts and contributes to the high-carbon lock-in of infrastructure in the buyer country</td>
<td>Supports the buyer country’s efforts to disburse climate finance without setting perverse incentives against own-country emissions reductions</td>
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Overall reduction in GHG emissions

A main objective of the SDM, reducing overall GHG emissions, requires a specific mechanism, especially if mitigation outcomes are used as offsets. To meet this objective, some of the offsets transferred should be cancelled and not counted towards any country’s target. An ambitious mechanism would require that at least 50% of the offsets cannot be claimed. Practically, this implies that, under an offsetting system, every time a buyer acquires 10 credits, it must cancel 5 of them immediately upon their purchase.

Set a 50% discount rate on all offsets used under CORSIA.

Avoiding double counting

As climate targets expand geographically, by sector, and in ambition, increasingly robust rules must be put in place to ensure that a single offset credit is not counted multiple times, e.g. by a country and an airline.

While accounting rules to avoid double claiming can be fairly complex, the overarching idea is simple and effective. For every tonne of CO2e reduced and claimed towards meeting a mitigation objective, a corresponding adjustment must be carried out. This means that, as it sells the offset, the host country must increase its emissions account (with the aim of correcting its inventory) by the amount of tonnes of CO2e reduced.

Since the emissions have been reduced physically in the country, measurements of national emissions reported in a country’s inventory will show a reduction of emissions due to the project, and this must be corrected to show that these emissions have actually been claimed by an airline. This correction to the host country’s emissions inventory ensures that the mitigation outcome will not be counted both by the original seller and the buyer.

For this to be possible, a host country should have a detailed overview of the projects implemented on its territory, and the quantity of CO2e reduced which is sold as offsets. Such overview requires that the country authorises each mitigation outcome before it is being sold out. This could happen through an automatic process after the country has set in place regulations and a maximum quantity of CO2e that is cleared for selling out.

To account for the role of CORSIA, all rules relating to registries, transparency, corresponding adjustments, and authorisation process under the Paris Agreement should apply to all article 6 mitigation outcomes, irrespective if they are destined for use in- or outside of the UNFCCC mechanism.

Host countries should authorize the sale of offsets before they are transferred to airlines, and each such offset should be subject to a corresponding adjustment in the host country’s emissions account.

Clear registries for accounting

Good accounting rules start with clear and transparent registries where all issuance, transfer, use and cancellation of units can be recorded and monitored. These should be set up in order to help verify compliance. In the case of article 6, a centralized log should be set up where all information is stored and publicly accessible. This will play an important role in avoiding double counting (see above) and ensuring environmental integrity as it will allow scrutiny of the systems by outside actors.

Rules of the Transparency Framework will need to be designed in a way that is compatible with the need for such a centralized registry under Article 6. It should guarantee that accurate data is reported in a user-friendly format, and transparency rules should apply identically to all countries, as soon as they decide to participate in article 6 mechanisms.

Set up a transparent international registry to track the issuance, transfer, use and cancelation of mitigation outcomes.

Avoiding negative impacts from mitigation projects

The new objective of promoting sustainable development under article 6, a goal which was never realized under the Kyoto Protocol markets, is an important element to ensure that the SDM benefits people and the environment in the short term, in addition to the long term benefits of reducing emissions.
Specific measures will need to be adopted at both international and national levels in order to promote sustainable development, but the first step towards this objective is to avoid that the implementation of mitigation projects harms local people. For this to be possible, significant improvements should be made on the design of pre-2020 markets, two of which are the inclusion of good local stakeholder consultation rules and the operationalisation of a grievance mechanism.

The first shall contribute to reducing adverse impacts of mitigation projects while also lowering the risk of conflicts which are lose-lose situations for project developers, local people, and the environment. The latter will make sure that in circumstances where unforeseeable harms emerge, affected people can still seek recourse through a predictable and fair mechanism.

In addition, the SDM should include technology restrictions on the eligibility criteria of projects, in order to avoid channeling finance towards obsolete projects with adverse impacts on the environment such as coal power plants.

Adopt robust local stakeholder consultation rules, set up a grievance mechanism under the SDM, and set technology restrictions against coal and other fossil fuel projects.

Conclusion

To be effective, article 6 should be a tool for raising ambition and facilitating the delivery of climate objectives. A single project-based market should be set up under it, with strong rules to avoid double counting and perverse incentives, promote environmental integrity, and prohibit any trades of junk credits. It should further be used as a tool for supporting national efforts through climate finance, and smoothly transition the world into an offset free era which is unavoidable if countries are to reach the objectives of the Paris Agreement.

Technical summary

The below table summarizes the key technical considerations of this briefing with the aim to inform policymakers ahead of the climate conferences in Bangkok and Katowice, where crucial decisions on the rules for the next generation of flexible mechanisms are expected to be taken. Notably, these elements encourage the transition towards a unified system for results-based climate finance which phases out the practice of offsetting for all sectors, including aviation.

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<th>Key principles of the overarching article 6 mechanism</th>
<th>Policy recommendation for operationalization</th>
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| The mechanism should lead to overall mitigation of global emissions.  
- Article 6.4(d) | • The SDM is set up as a results based climate finance (RBCF) mechanism, which is used to finance mitigation efforts in developing countries and helping developed countries meet their climate finance objectives  
• 50% of all mitigation outcomes which continue to be sold as offsets should be cancelled automatically at the point of transfer. |
| The mechanism should foster sustainable development.  
- Article 6.4(a) | • The mechanism should include robust rules for local stakeholder consultations  
• The mechanism should include a grievance mechanism  
• The mechanism should exclude harmful technologies from registration, including coal power plants |
| The mechanism should promote environmental integrity.  
- Article 6.2 | • Stringent additionality testing and a ratchet mechanism for NDC scope should be included  
• CDM credits and projects should not be allowed in any post-2020 markets |
| The mechanism should avoid double counting.  
- Article 6.2 | • Mitigation outcomes should be tracked in a centralized and public transaction log  
• All transfers of offset credits should be subject to corresponding adjustments and be authorized by the buyer country. |

See our “Local stakeholder consultation guide” here