

Carbon crediting and official development assistance (ODA) – A summary of key issues

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Dr. Lambert Schneider Isabel Haase

Oeko-Institut e.V.



Öko-Institut e.V. / Oeko-Institut e.V.

info@oeko.de www.oeko.de

Geschäftsstelle Freiburg / Freiburg Head Office

Postfach / P.O. Box 17 71

79017 Freiburg. Deutschland / Germany

Phone: +49 761 45295-0

Büro Darmstadt / Darmstadt Office

Rheinstraße 95

64295 Darmstadt. Deutschland / Germany

Phone: +49 6151 8191-0

Büro Berlin / Berlin Office

Borkumstraße 2

13189 Berlin. Deutschland / Germany

Phone: +49 30 405085-0



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1 Introduction

The transition to a climate-neutral economy requires unprecedented investments on a global level. Official Development Assistance (ODA) and revenues from carbon credits are two financing streams for developing countries to deal with this challenge.

The use of ODA in the context of carbon crediting activities is an issue that has not been addressed thoroughly in international rules and carbon crediting programs. In the context of the Kyoto Protocol, basic principles regarding the use of ODA were agreed in the context of the Clean Development Mechanism (CDM): Project developers had to confirm in their Project Design Document (PDD) that the project does not lead to a 'diversion' of ODA. This effectively allowed the co-financing of CDM projects through ODA. The new context of the Paris Agreement, and a more diverse carbon market with different types of carbon credits and different uses for carbon credits, call for a reassessment of whether and how ODA should be used in the context of carbon crediting.

Ensuring environmental integrity and avoiding double counting of efforts are important issues in this context. This is particularly the case in relation to the claims made about these two financing streams. Donors of ODA¹ primarily claim their financial contribution towards **ODA** and climate finance goals, without receiving any assets in return from the recipient country. In this case, the emission reductions achieved through the ODA are usually communicated for information purposes only and are not counted by the donor towards achieving any mitigation targets. By contrast, buyers of carbon credits can use the credits in two different ways: they may use the emission reductions resulting from the carbon credits to fulfill their mitigation targets or they may use the carbon credits as a vehicle to disburse 'results-based finance,' without claiming the emission reductions towards a mitigation target.

Against this background, this paper explores the challenges that arise when using ODA in the context of carbon market projects, taking into account the new context of the Paris Agreement and the different types and uses of carbon credits. Three possible uses of ODA in relation to carbon markets are examined: using ODA to purchase carbon credits, using ODA to support carbon crediting readiness activities and using ODA to co-finance projects that generate carbon credits. This paper does not address the question of whether and under what circumstances ODA used in the context of carbon crediting may be claimed as 'climate finance'.

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In this paper, we use the terms 'donor country'/'recipient country' when referring to countries in the context of ODA, and 'buyer country'/'host country' in the context of carbon credits.



2 Overview of carbon crediting in the new context of the Paris Agreement

Different type of carbon crediting mechanisms emerged over the past two decades. This includes two multilateral mechanisms: the Clean Development Mechanism (CDM) under the Kyoto Protocol and the (forthcoming) Article 6.4 mechanism under the Paris Agreement. In addition, carbon credits are generated under various non-governmental carbon crediting programs, such as the Verified Carbon Standard (VCS) and the Gold Standard (GS), and some governmental mechanisms, such as the Australian Carbon Credit Unit Scheme (see Figure 1).

The carbon credits generated under these mechanisms can – depending on the context – be used for different purposes, including towards achieving nationally determined contributions (NDCs) under the Paris Agreement, meeting obligations under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), meeting voluntary goals, for domestic compliance schemes such as emissions trading systems (ETSs), and as a vehicle to disburse results-based climate finance.

A key distinction in the new context of the Paris Agreement is whether or not carbon credits are authorized by the host country for use in the context of Article 6.2 of the Paris Agreement. Article 6.2 establishes an accounting and reporting framework for cooperative approaches, including the international transfer of emission reductions, referred to as "internationally transferred mitigation outcomes" (ITMOs). Carbon credits that are authorized for use under Article 6.2 constitute ITMOs. ITMOs may be generated through bilateral agreements, such as agreements to link ETSs, or through the authorization of carbon credits from the Article 6.4 mechanism or other carbon crediting mechanisms (e.g. GS or VCS).

The decisions under Article 6.2 specify that ITMOs may be used to achieve NDCs or for "other international mitigation purposes" (OIMP), which may include the use under CORSIA or the use by companies in the voluntary carbon market. Carbon credits that are not authorized – and are thus not ITMOs - shall not be counted towards achieving NDCs or obligations under CORSIA.

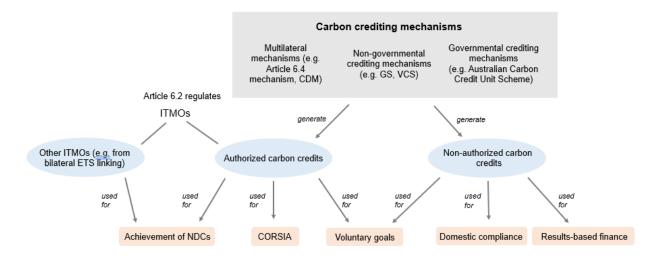


Figure 1 Overview of carbon crediting in the context of the Paris Agreement

Source: Own illustration

Upon the 'first transfer' of an ITMO, the host country has to apply a 'corresponding adjustment', by making an addition of one ton of CO₂ equivalent to its reported emissions. These additions are considered in establishing an emission balance and accounting for its NDC. This ensures that the

host country does not count the emission reductions towards achieving its own target and thus avoids double claiming of emission reductions.

Next to carbon credits authorized under Article 6 which thus constitute ITMOs, there will continue to be non-authorized carbon credits. These include non-authorized carbon credits generated under the Article 6.4 mechanism, referred to as 'mitigation contribution Article 6.4 emission reductions,' and carbon credits generated under governmental and non-governmental carbon crediting programs, such as the Australian Carbon Credit Unit Scheme or the VCS. These non-authorized carbon credits can be used to fulfill voluntary goals (noting that the claims that may be made in association with such uses are still being debated), for domestic compliance schemes, and for delivering results-based climate finance. For these credits, a corresponding adjustment is not carried out.



3 Can ODA be used to purchase carbon credits?

One way of using ODA could be to buy carbon credits. When using public funds to buy carbon credits, it is important to consider whether these are "ODA-eligible," i.e. if the type of funding provided through the purchase of carbon credits still falls under the definition of ODA. According to the OECD DAC, for financial flows to be classified as ODA they must a) go to developing countries or territories (or to citizens of those countries) on the DAC list of ODA recipients or to multilateral development institutions; b) be dispersed by official agencies; c) have the 'promotion of economic development and welfare' of recipient countries as their main objective, and d) have a concessional character, which implies some degree of a 'grant element' (OECD DAC 2018).

To assess whether the purchase of carbon credits can be considered as ODA-eligible, we identify two factors that we regard as important to consider: (a) how the carbon credits are used and (b) the new context of the Paris Agreement under which all countries have NDCs.

3.1 Purposes for which carbon credits are used

Governments can use carbon credits for three different purposes:

- **Case A:** Compliance use: Governments can use carbon credits to fulfill compliance targets, such as targets under the Kyoto Protocol or NDCs under the Paris Agreement. In this case, governments claim the emission reductions associated with the carbon credits to achieve their mitigation targets.
- **Case B: Voluntary goals:** Governments can use carbon credits to achieve voluntary mitigation goals, such as offsetting the emissions of their administrations. As under case A, governments claim the emission reductions to achieve their voluntary mitigation goals.
- Case C: Disbursing results-based finance: Governments can use carbon credits as a vehicle to disburse results-based finance, by purchasing and cancelling the credits, and thus not using them to fulfil mitigation goal (neither voluntary nor compliance). Several governments and multilateral institutions have set up funds that used the CDM in this way. For example, carbon credits purchased under the World Bank's Pilot Auctioning Facility² were partially used for this purpose. Similarly, buyers in the voluntary carbon market may support projects financially, also referred to as "contribution claims," likewise not counting them towards any mitigation goal.

In the context of the Kyoto Protocol, the rules of the OECD DAC for the CDM specify that if Certified Emission Reductions (CERs) are generated from an ODA-financed project, the revenues have to be deducted from ODA funds, regardless of whether carbon credits are bought by the ODA donor or another party (OECD DAC 2004, Annex). This means that, in principle, ODA could not be used to purchase CERs³.

However, the rules of the OECD DAC were made at a time when CERs were envisaged to be mainly used for compliance purposes under the Kyoto Protocol (case A above). In the years after these

The Pilot Auctioning Facility for Methane and Climate Change Mitigation is a results-based payment mechanism. The idea is to pay only after emission reductions underlying carbon credits have been verified (World Bank 2023).

³ A related question is how the value of the carbon credits should be determined when subtracting funds for purchasing carbon credits from ODA. One option is using the market price or the price in relevant emission reduction purchase agreements. This issue is not the focus of this paper and thus not further discussed here.

rules were adopted, governments also started to purchase CERs for different purposes, including to achieve voluntary goals (case B above) or for disbursing results-based climate finance (case C above).

There is a broad consensus that ODA cannot be used by governments to purchase and use carbon credits for compliance purposes (case A). Doing so would contradict the purpose of ODA, as purchasing an asset to fulfil obligations does not have a concessional character. Rather, the governments save costs in achieving their obligations. Though the projects may promote development and welfare in the recipient country, this also holds for many other assets traded with developing countries and is thus not sufficient for ODA eligibility.

There are different views as to whether the purchase of carbon credits for meeting voluntary goals should be ODA-eligible (case B). Some governments have declared such funds as ODA. They may argue that the mitigation goals are voluntary and thus constitute a voluntary contribution by governments. However, governments still purchase an asset, similar to other assets, and using carbon credits from developing countries to achieve these voluntary goals is more cost-effective than reducing emissions or purchasing domestic carbon credits. The trade thus involves considerable cost savings for the governments in achieving their voluntary goals. We argue that such purchases do not have a concessional character and should therefore not be ODA-eligible. A comparable analogy might be the purchase of sustainably produced, fair-trade coffee: Even though fair trade coffee production aims at raising the living standards of local communities and has other ecologic benefits, the transaction would still be a purchase a good, to the benefit of the buyer. Similarly, if carbon credits are purchased to fulfill a mitigation goal, the primary purpose of this transaction is the benefit of the buyer: they have to exert less effort to reach their goal.

Finally, there is also a broad consensus that using carbon credits to disburse results-based climate finance is ODA-eligible (Case C). In this case, carbon credits are purchased with the intent of supporting projects in developing countries and without claiming the associated emission reductions. This type of transaction may therefore be considered to not have a concessional character and should qualify as ODA (Schneider et al. 2015).

3.2 New context of the Paris Agreement

In addition to the different purposes for which carbon credits may be used, the new context of the Paris Agreement is an important consideration. Under the Kyoto Protocol, host countries did not have emission reduction targets. In contrast, under the Paris Agreement all countries must communicate NDCs. The implications of this new context depend on what type of carbon credits are transferred:

• Transfer of ITMOs: If emission reductions are transferred in the form of ITMOs, host countries must apply 'corresponding adjustments'. This implies that the host country cannot use the emission reductions to achieve its own NDC. Therefore, selling ITMOs creates a liability for the host country. For each ITMO sold, the host country bears the risk that there is no real emission reduction (e.g. if the mitigation activity is not additional or the emission reductions are overestimated). In this case, the host country has to exert more effort to fulfil its NDC. Furthermore, if buyer countries purchase ITMOs at a low price, it also means that the host countries have fewer low-cost options to choose from. Therefore, they might need to invest more to reach their targets. Importantly, this liability applies irrespective of the purpose for which the ITMOs are used by the buyer, i.e. whether they are used for compliance purposes (case A), voluntary goals (case B) or results-based finance (case C).



The extent to which such a liability arises depends on the context. If the emission reductions are additional, robustly quantified, permanent, not double counted, visible in the host country's national GHG inventory and covered by the countries NDC, then – in an ideal world – the addition made to the reported emissions (in the form of a corresponding adjustment) would be equal to the reductions that the country records in its national GHG inventory. In other words, the obligation to apply a corresponding adjustment would be balanced with lower observed emissions, not creating an actual liability for the country. This hinges on many assumptions, however, such as the quality and granularity of the national GHG inventory.

Moreover, an important aspect is whether the mitigation outcomes are shared between the host country and the buyer. A key objective of Article 6 cooperation is to enhance ambition. A common understanding is that the engagement in Article 6 should enable both the buying country and the host country to raise ambition. For buying countries, the Article 6 cooperation lowers the costs of achieving their NDCs which may enable them to establish more ambitious NDCs. For host countries to raise ambition, it is critical that the mitigation outcomes from the Article 6 cooperation are shared between the host country and the buyer country. This can occur either by benefit sharing arrangements, e.g. by transferring only part of the achieved emission reductions to the buyer, by establishing ambitious baselines and therefore only crediting part of the actual emission reductions, or by using crediting periods that are shorter than the lifetime of the mitigation activity. These provisions can ensure that the host country can use part of the emission reductions to achieve its own NDC, which in turn may enable the country to raise the ambition of its NDC over time, while the mitigation costs may be fully funded by the buyer. In this case, the ITMO transfer would at least partially have a concessional character: the buyer funds the full mitigation costs but only uses part of the achieved emission reductions to achieve its own goals.

In conclusion, whether the engagement in ITMOs creates a liability for the host country depends on the specific circumstances. In practice, ITMO transfers may partially create a liability for the host country and partially have a concessional character.

Transfer of non-authorized carbon credits: If emission reductions are transferred in the form
of mitigation contributions, or other types of carbon credits that are not authorized under Article
6.2 of the Paris Agreement as being ITMOs, the situation is different. In this case, the host
country can use the transferred emission reductions to achieve its own NDC. Selling such nonauthorized carbon credits therefore does not create a liability for the host country.

3.3 Recommendations

Based on the above considerations, we recommend that the ODA eligibility of the purchase of carbon credits should depend on the use of the credits and on whether authorized or non-authorized carbon credits are purchased (see Table 1). We argue that the purchase of carbon credits for achieving mitigation goals (cases A and B) should not be eligible, irrespective of the type of carbon credit, because there is a clear benefit to the buyer in the form of cost savings. This transfer is thus not purely concessional. In the case of using carbon credits for results-based finance, the purchase and cancellation of non-authorized carbon credits is a clear case of a concessional transaction. In the case of purchase of ITMOs, this depends on various parameters, such as whether the emission reductions are covered by the NDC.

Table 1	ODA	ODA eligibility of carbon credits by use cases and authorization status				
		Compliance use (case A)	Voluntary goals (case B)	Results-based finance (case C)		
Authorized carbo credits (= ITMOs		Not ODA-eligible		Depends		
Non-authorized carbon credits		Not permitted under the Paris Agreement	Not ODA- eligible	ODA-eligible		

In the forum of the OECD DAC, the discussion about how to regulate ODA in the context of Article 6 is still ongoing. In March 2023, the OECD DAC Working Party on Development Finance Statistics deliberated a proposal on how to deal with ODA in relation to co-operative approaches under Article 6. Members are currently still invited to express their views on the ODA eligibility of financial transfers in the context of co-operative approaches, and to provide real world examples of Article 6 activities that they would consider ODA-eligible (OECD DAC 2023).



4 Can ODA be used to support readiness activities for carbon crediting?

Besides funding specific projects, public funds can also be used to support host countries to build the structures and processes necessary for implementing Article 6, oftentimes referred to with the umbrella term "Article 6 readiness". While there is no generally agreed definition, readiness activities can be roughly divided into two categories⁴: Firstly, activities that do not involve concrete projects but create the necessary framework conditions, such as building the necessary infrastructure, setting up GHG inventories, developing a regulatory framework and capacity building. Secondly, activities that aim to develop pilot projects, which can later generate carbon credits. Currently, most activities fall into the former category (Greiner et al. 2020).

Box 1 Example of project readiness activities

The IKI project 'Supporting Preparedness for Article 6 Cooperation (SPAR6C) funded by the BMWK (IKI 2023; Green Growth Knowledge Platform, 2023) has a volume of €22.4 million and is conducted in partnership with the countries Colombia, Pakistan, Thailand and Zambia. The project includes readiness activities, such as support with long-term planning of policies and institutional capacity building, carbon market framework and eligibility criteria for project activities, as well as the design and development of pilot projects if countries are interested in creating a project pipeline. This includes developing Mitigation Activity Design Documents (MADDs) and due diligence for project implementation (Carbon Mechanism Review 2022). The technical implementation of these activities will not be financed by the project means. Thus, buyers of credits have to invest in upfront funding to be able to generate credits.

When deciding whether an activity is ODA-eligible, it is important to consider whether it may generate carbon credits down the line. Readiness activities of the first category – i.e. those creating framework conditions for Article 6 implementation – do not directly generate carbon credits. Therefore, these activities can be considered ODA-eligible. For the second category of activities, i.e. supporting pilot projects, several challenges arise when ODA funds are blended with revenues from carbon credits, as discussed in chapter 4. Nonetheless, there are likely some grey areas. For example, if an activity involves a scoping study to gauge potential mitigation options, it may not be considered a direct financing of a mitigation activity. In comparison, it is more difficult to draw the line when funding activities directly lead to the implementation of a project, such as the development of Project Design Documents.

This distinction is loosely based on Greiner et al. (2020), who differentiates between different types of ,Article 6 piloting.

5 What challenges arise when funding mitigation activities by ODA and carbon credit revenues?

Some mitigation activities have been funded by both ODA and carbon credit revenues. This is sometimes referred to as a "blended finance" approach (see Box 2). Such blended financing can be applied to activities on different scales: project-based mitigation, programmatic approaches, and 'scaled-up crediting', such as crediting for the emission reductions of an entire sector'(Spalding-Fecher et al. 2021). It is often pursued to tap into more potential funding sources.

Box 2 Example of a blended financing project

The Ouarzazate - Concentrated Solar Power Project consisted of installing 500 MW capacity of concentrated solar power in Morocco. For the first stage of the project, in which 130 MW capacity were installed, CERs were issued under the CDM. The project received funding from, inter alia, the Word Bank, the European Investment Bank and the Kreditanstalt für Wiederaufbau (KfW) (UNFCCC 2021). The KfW contributed 830 million EUR to the total financing volume of 2 billion EUR. The KfW website states that the remainder was covered by other public sector-donors and development banks (KfW 2021). This suggests that funding through carbon revenues only made up a minor share.

Combining ODA with carbon credit revenues to finance a project comes with several environmental integrity challenges for carbon crediting: the additionality of mitigation activities, double counting of efforts, and – associated with the latter – the potential distortion of the carbon credit market. In the following sections, we will discuss these aspects in different contexts.

To do so, we draw on an example to illustrate the potential implications. In our example, a wind power project is implemented in Country A. The project has a technical lifetime of 10 years and abatement costs of 12 million EUR per year, and thus 120 million EUR in total. The annual emission reductions are 300,000 tCO₂e, corresponding to 3 MtCO₂e over the 10 years.

5.1 Existing approaches addressing blending of ODA and carbon crediting revenues

The combination of ODA and carbon credits has not been addressed in international rules or by carbon crediting programs. Some donor programs, however, explicitly address this matter. One example is the International Climate Initiative (IKI). The IKI states in its thematic call of 2022 that "emission reductions achieved through IKI funds may not generate emission certificates or other emission credits tradable for the compliance market" (IKI 2022, p. 9). However, the call establishes some exceptions: It allows using IKI funds for the development of 'conceptional pilot projects' under Article 6, if the project implementation is financed through other sources. An exact definition of 'conceptional pilot project' is not established, hence this delineation might be difficult to apply in practice. Furthermore, start-up financing for Article 6 projects with IKI funds is permissible as well, if the generated carbon credits resulting from these funds are "set aside," i.e. cancelled. This might mean that once the IKI funding has ended, a project can generate carbon credits. Additionally, generating carbon credits from IKI-funded projects is possible on the voluntary carbon market, as long as they fulfil Gold Standard requirements (IKI 2022).

Provisions in former rounds of funding were similar but less specific. The thematic calls of 2020, 2019 and 2018 excluded the possibility of having an IKI-project financed through selling carbon credits on the compliance market, but likewise allowed for blended financing with carbon credits sold



on the voluntary carbon market. Furthermore, they did not specify any restrictions in the case that the credits are cancelled (IKI 2018, 2019a, 2019b, 2020).

5.2 Implications for additionality

Carbon crediting aims to finance climate action that goes beyond what would have happened in any case. This concept is commonly referred to as "additionality" and is one crucial aspect of the environmental integrity of carbon credits. A mitigation activity is additional if it would not have been implemented without the generation and sale of carbon credits. One way to test for additionality is to assess the financial viability of a project, i.e. whether a project is financially feasible without carbon credits. If a project is already financially viable without carbon credits, it is unlikely that the activity is additional.⁵

When blending ODA funding and carbon credit revenues, two aspects are important regarding additionality:

Role of carbon credit revenues: Generally, additionality is considered to be more likely the
higher the GHG abatement costs per ton of CO₂ are and the greater the impact of carbon credits
is in lowering the GHG abatement costs (Sutter 2003; Schneider et al. 2022). If the share of
financing through carbon credit revenues is low, it is less likely that the carbon credits were
decisive for implementing the project.

For instance, if our example of a wind power project were funded 95% by ODA (114 million EUR) and 5% through carbon credits (6 million EUR), then it could be argued that it is unlikely the wind power plant would not have been built without the revenue from carbon crediting. The relatively small share of revenues from carbon credits raises questions as to whether carbon credits were decisive and whether the project would have been implemented with ODA alone. It is, however, difficult to assess how high the contribution of carbon credits to the overall financing must be for it to be decisive to proceed with the investment, since this is highly dependent on the specific project context.

Potential substitution of carbon credit revenues with ODA: Moreover, there is a possibility
that, in the absence of carbon credit revenues, the donor of ODA would be able to add the
missing share from their own funds, or the project would receive funding from another ODA
donor. In the example case, this would mean that Country A would finance the remaining 6 million
EUR through its ODA funds.

A special case in this regard is incremental cost funding – an approach to ODA which aims at only funding the cost that would make a project financially viable. This concept is applied by, for example, the Global Environmental Facility, which recommends including an incremental cost analysis as part of the project preparation (GEF 2020). Where incremental cost funding is combined with carbon revenues, the additionality of the mitigation activity would be even less likely, since the aim of incremental cost funding is to pay the share that a project needs to be implemented. Therefore, it is very likely that more ODA would be provided if carbon credit revenues were not available, making the project financially viable.

Besides testing for financial viability, there are other ways of assessing whether an activity is additional. These include evaluating whether there are laws or regulations that require the implementation of the activity ("regulatory surplus") or gauging at what point carbon revenues were considered in the investment decision ("prior consideration"). Best practice is to use these tests in combination.

Scalable projects are another special case (e.g. the financing of different wind power plants under the same overarching intervention). In this case, more financing through carbon credits might lead to the overall project having a larger scope. It could be the case that these increments are additional (Spalding-Fecher et al. 2021). However, there is still the possibility that carbon credits only substitute financing that would otherwise stem from other ODA sources.

5.3 How many carbon credits should be issued to projects with ODA co-funding?

If a mitigation activity is financed through both the sale of carbon credits and ODA, the question arises as to how many carbon credits should be generated by the project. The current practice in the carbon market is that all emission reductions achieved through the project are issued as carbon credits. However, this approach comes with several pitfalls. In the following, we will discuss these pitfalls and a possible solution to address them.

5.3.1 Risks of double counting of efforts and market distortions

When generating carbon credits from a co-financed project, one issue that arises is 'double counting of efforts'. While not immediately obvious at first glance, it can have substantial implications for environmental integrity.

The problem is best illustrated through our example of a wind power project. Here, we assume that Country A uses ODA funds to finance 96 million EUR (80%) of the total abatement costs of the wind power plant in Country B. The remaining 24 million EUR (20%) are also financed by Country A, but through the purchase of authorized carbon credits (ITMOs) which the country uses to achieve its NDC. Current common practice is that carbon credits are issued for all emission reductions, a total of 3 MtCO₂e over the 10-year period. In this case, Country A could purchase the carbon credits generated by the project at a cost of 8 EUR per ton of CO₂ (24 million EUR divided by 3 MtCO₂e). If it had bought the carbon credits without ODA support, the same credits would have cost 40 EUR per ton of CO₂e (120 million EUR divided by 3 MtCO₂e). This means that Country A subsidizes its purchase of carbon credits with ODA, contradicting the purpose of ODA (see chapter 3).

The ODA financing would be (indirectly) accounted for in two places: the ODA serves to reduce the prices of carbon credits that Country A uses to achieve its NDC, and, at the same time, the ODA disbursed for this purpose can also be counted towards an ODA financing target. This issue has been referred to as 'double counting of efforts between mitigation and climate finance goals' (Schneider et al. 2015) and criticized as a violation of environmental integrity (Dutschke & Michaelowa, 2006; Spalding-Fecher et al., 2021).

In addition to double counting of efforts, subsidizing the price of carbon credits can also lead to market distortion. According to economic theory, carbon markets are economically most efficient when carbon credits finance the mitigation options with the lowest abatement costs, thereby generating the maximum amount of emission reductions (Hallegatte 2023). However, the current common practice in the carbon market runs counter to this principle, as ODA is effectively used to subsidize carbon crediting projects. Additionally, using ODA likely reduces the cost of capital, as it de-risks investment (Spalding-Fecher et al., 2021). This means that financial resources are not allocated efficiently to the mitigation activities with the lowest abatement costs. While some buyers do not necessarily aim to achieve cost effectiveness but rather focus on more expensive, "high-hanging fruit" projects that are important for the transition towards climate neutrality, cost-effectiveness still plays an important role in some markets, such as CORSIA where airlines operate in a competitive environment and aim to buy carbon credits at the lowest costs.



Similar issues would arise when another country or a company purchased the carbon credits. If, in our example case, the carbon credits are bought by Country C, Country A could still count the ODA streams towards its ODA target, and Country C could purchase the carbon credits at a reduced price to fulfill its NDC. The same would apply if a private company purchased the carbon credits to fulfill its voluntary goals. In this case, Country A would effectively subsidize the purchase of carbon credits for Country C or the private company, likewise leading to double counting of efforts and to distortion of the market. Furthermore, this may have political implications, as it is debatable whether it is in the interest of Country A to subsidize the purchase of carbon credits by Country C or by private companies.

These issues arise irrespectively of whether or not the carbon credits have been authorized under Article 6. Therefore, these issues are relevant to both authorized and non-authorized carbon credits. Moreover, they are relevant in the use cases in which the carbon credits are used to fulfill some sort of mitigation target or goal, i.e. when they are used for compliance targets (case A, see chapter 3) or for voluntary mitigation targets (case B). Results-based finance (case C) is the only use of carbon credits for which these issues are not relevant.

5.3.2 How to address double counting of efforts and market distortion

Internationally agreed rules do not address the double counting of efforts and market distortion through ODA. Under the CDM, project developers had to confirm in their Project Design Document that the project does not lead to a 'diversion' of ODA (Annex B of 3/CMP.1), effectively allowing financing of CDM projects through ODA. The rules governing Article 6 of the Paris Agreement do not speak to consideration of ODA at all. The OECD DAC determined that CERs generated from ODA financed projects should be deducted from ODA funds, irrespective of whether the CERs are sold to third parties or used by the donor (OECD DAC 2004). While this clarifies how the financing streams should be accounted for, it does not answer the question of how many carbon credits should be generated from the co-financed activity. The issue is also not addressed by major carbon crediting programs on the voluntary carbon market (Spalding-Fecher 2021).

The issue of double counting of efforts could be addressed by either not allowing the ODA donor to count the ODA towards its ODA target, or not permitting that any carbon credits are generated from the project. This would de facto impede the blended financing of projects. An alternative approach is issuing carbon credits only relative to the financial contribution from carbon credit revenues, an approach which is referred to in literature as "proportional attribution" (Spalding-Fecher et al. 2021).

The proportional attribution approach means that carbon credits are only issued for the share of emission reductions that are financed through the carbon credits. This is again illustrated through our example project: Country B uses public funds to finance 96 million EUR (80%) of total abatement costs for the project building the wind power plant in Country A. Another 24 million EUR (20%) is financed through selling authorized carbon credits (ITMOs). Correspondingly, ITMOs are issued for 20% of the total emission reductions, i.e. 0.6 MtCO₂ over the 10-year lifetime of the project. The price per carbon credit is 40 EUR (24 million EUR divided by 0.6 MtCO₂e), which is equal to the actual abatement costs. The carbon credits could be bought by Country B, Country C, or a private company and could be used to fulfil compliance targets or voluntary goals, respectively. At the same time, Country B can count the total of the 96 million EUR of finance towards its ODA target.

Proportional attribution would therefore allow both the donor of ODA and the buyer of carbon credits to fulfil their objective while avoiding double counting of efforts. The ODA does not subsidize the price of the carbon credits; the buyer has to pay the actual abatement costs. The carbon credits can be used to fulfill mitigation targets or goals, and the ODA can be counted towards an ODA target.

This approach also lessens the market distortion. The costs of generating the carbon credits would be equal to the abatement costs, which increases the likelihood of financial resources of the carbon market being allocated to the projects with the lowest abatement costs (Fuessler et all. 2021). However, there would likely still be some degree of market distortion since allocating ODA towards a project would still reduce the cost of capital for project developers. Furthermore, it is likely that using ODA to finance a share of a project influences the decision as to whether to go ahead with a project or not. Therefore, ODA donors still have leverage in deciding which carbon market projects are more likely to proceed. This means that there would likely still be some market distortion, though to a lesser extent than under the current market practice.

While addressing the double counting of efforts and market distortion, this approach comes with some practical challenges due to its more complex accounting requirements (Spalding-Fecher et al. 2021). Firstly, the proportional attribution approach requires certain information. It is necessary to identify all relevant financing streams and abatement costs and to clearly establish project boundaries (Spalding-Fecher et al. 2021). However, for projects that conduct an investment analysis to demonstrate additionality, the additional effort of implementing the proportional attribution approach is relatively low. For other projects, relevant data is likely already available, limiting the additional effort to implement the proportional attribution approach.

Furthermore, the implementation of proportional attribution is easiest when project partners agree on an estimate of abatement costs and financing streams at an early project stage, so that the volume of carbon credits to be issued can be determined. One difficulty, however, is that both financing streams and the total emission reductions can change during the course of a project (Spalding-Fecher et al. 2021). Spalding-Fecher et al. (2021) point out that this could be addressed through using the marginal abatement costs as a first basis for the analysis, since those are easier to estimate, as well as determining provisions in the mitigation outcome purchase agreement (MOPA) which specify conditions for reviewing the attribution of emission reductions.

Another practical challenge is determining the grant equivalents of the ODA. In 2014, the OECD DAC agreed to use grant equivalents to quantify ODA. Since loans have to be repaid by the recipient, not the total cash flow but only the concessional element is accounted for, taking into account the interest rate, loan maturity, discount rate and the repayment period (OECD DAC 2023a). While these calculations can be challenging, there are already tools available to facilitate the process (Spalding-Fecher 2021). Moreover, these calculations must be conducted for ODA purposes in any case.

Finally, as these issues are not widely discussed, relevant actors in the carbon market, ODA donors and host countries need to be made aware of proportional attribution as an appropriate solution (Spalding-Fecher et al. 2021).



6 Recommendations

There are different ways of combining ODA with carbon credits, each of which comes with its own set of challenges: ODA could be used to purchase carbon credits, to finance readiness activities, or to co-finance projects along with carbon credit revenues. The new context of the Paris Agreement adds an additional layer of complexity. In this working paper, we have analyzed different ways in which ODA can be combined with carbon credits.

Based on our analysis, we recommend the following:

- In most cases, the purchase of carbon credits should not be ODA-eligible. Whether a purchase is "ODA-eligible" depends on two aspects: Firstly, how the carbon credits are used is important. If carbon credits are used to either fulfill compliance targets or voluntary goals, we recommend that the purchase of such credits not be ODA-eligible. However, if they are used as a form of results-based finance or as contribution claim, i.e. not to achieve a mitigation goal, the purchase can be considered to fulfil ODA requirements. Secondly, it is important to consider whether the carbon credits have been "authorized" under Article 6 and thus constitute ITMOs. If so, this implies a liability for the host country, irrespective of the way in which the carbon credits are used, though the degree to which a liability arises depends on the specific context. We argue that using ODA to purchase ITMOs may contradict the purpose of ODA of being concessional, depending on the context. For these reasons, we recommend that only the purchase of non-authorized carbon credits for the purpose of delivering results-based finance be ODA-eligible.
- If ODA donors wish to support an ambitious implementation of Article 6, readiness activities creating respective framework conditions can be ODA-eligible, depending on the type of activity. As long as funds are not used to directly lower the cost of generating carbon credits, concerns regarding additionality, the double counting of efforts or market distortion do not apply. In contrast, readiness activities that support pilot projects are in a grey area, if these projects create carbon credits at a later stage. In this case, the above-mentioned issues may arise. The exact delineation is difficult and depends on the specific activity. For example, a scoping study to gauge potential mitigation options may not be considered a direct financing of a mitigation activity, whereas the development of Project Design Documents might cross that line.
- When blending ODA and carbon credits, the grant element of ODA-eligible instruments, such as grants and concessional loans, should only make up a minor share of a project's financing structure to avoid additionality risks. Additionality is more likely the greater the impact of carbon credits is in lowering the GHG abatement costs. Therefore, if the share of financing through carbon credit revenues is low, it is less likely that the carbon credits were decisive for implementing the project. Moreover, a low share of financing through carbon credits increases the possibility that, if there were no carbon credit revenues, the donor of ODA would be able to add the missing share from its own or other funds.
- Moreover, when blending ODA and carbon credits, carbon credits should only be issued for the share of emission reductions that corresponds to the share of financing stemming from carbon credits ("proportional attribution"). The current practice of generating carbon credits for all emission reductions leads to the double counting of efforts and market distortion. Double counting of efforts means that ODA financing is accounted for in two places: the ODA reduces the prices of carbon credits that the donor can purchase, and, at the same time, the ODA disbursed for this purpose can also be counted towards an ODA financing target. This also

leads to market distortion since the carbon price no longer reflects the true abatement costs due to the ODA subsidy of the carbon credits.



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