

Negotiating cooperation under Article 6 of the Paris Agreement

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EXECUTIVE SUMMARY

The purpose of this policy paper is to explain the crunch issues in negotiations on approaches to international cooperation under Article 6 of the Paris Agreement in generally accessible language. We also aim to shed light on the key differences between negotiating Parties persisting before the 25th Conference of Parties (COP25) to the UN Framework Convention on Climate Change (UNFCCC). The latter is done through inputs received from negotiators. We see understanding the issues and Party positions as a key step necessary to identify solutions in these highly political as well as technically complex negotiations. This is particularly the case for heads of delegations who will be confronted with the need to identify political solutions for technically challenging issues with very limited time at hand.

Article 6 offers Parties three modalities of cooperation: two market-based ones and one explicitly non-market based. COP25 (also the second Conference of the Parties serving as the meeting of Parties to the Paris Agreement, or CMA2) is to decide on the detailed rules on implementation of:

- Bilateral or multilateral **cooperative approaches** where Parties transfer mitigation outcomes internationally to facilitate the achievement of their nationally determined contributions (NDCs) (Article 6.2). CMA2 is to adopt guidance for these cooperative approaches to regulate the key principles of cooperation, reporting requirements, and accounting for the internationally transferred mitigation outcomes (ITMOs) through so-called “corresponding adjustments”.
- A **crediting mechanism** under the auspices of the UNFCCC where emission reduction credits will be issued for activities authorised by Parties (Article 6.4). These emission reduction credits can then be acquired by other Parties. CMA2 is asked to adopt the rules, modalities, and procedures for this mechanism.
- A framework to promote **non-market approaches** (Article 6.8). CMA2 is tasked to adopt a work programme to operationalise this framework.

Article 6 can play a key role in promoting climate change mitigation activities and ambition. If designed properly, it can strongly contribute to achieving the long-term targets of the Paris Agreement. Robust international cooperation is vital for shifting the global finance flows towards low-carbon and climate resilient development. The three approaches under Article 6 can mobilise action by non-governmental actors, which in turn can allow governments to raise the ambition levels of their NDCs. In order to achieve this, the rules for Article 6 must be as simple and straightforward as possible, while not restricting participation opportunities to a club of industrialised countries and emerging economies. Simultaneously, the rules must be robust and safeguard environmental integrity to ensure both private and public sector trust in international cooperation.

If an international agreement on Article 6 is not achieved at COP25, the already prolonged period of uncertainty about the future of international carbon markets will continue further. This will adversely impact the implementation of NDCs that rely on international support. It will slow down efforts of governments to link their emissions trading schemes. It will make it more difficult to introduce carbon taxes with an offsetting component. Further mitigation activities in developing countries triggered by carbon market revenues in the past and precariously sustained until now will be closed down. While some Parties consider that the transparency decision which includes a section on reporting for ITMOs is a sufficient backstop to still go ahead with international cooperation in the absence of an agreement on the Article 6 rulebook, we want to highlight that reporting under the transparency framework will only start in 2024, does not include minimum requirements for Article 6 activities to be implemented, and does not accommodate different needs and capacities of countries when pursuing international cooperation.

To finalise negotiations, Parties will have to resolve a number of key crunch issues by COP25 and find an answer to three fundamental questions:

How to design cooperation in a context where all Parties nationally determine their contribution to the overarching objectives of the Paris Agreement in different forms?

- How can two countries account for transfers in the context of the achievement of their NDCs if they have different types of vintages or different metrics?
- What role does the host country play in the context of the governance and implementation of the Article 6.4 mechanism?
- Will the same or different rules apply for the design of activities, use of ITMOs, reporting requirements, and accounting approaches under Article 6.2 and Article 6.4?
- How to design the transition process from the market mechanisms under the Kyoto Protocol towards Article 6, in particular how to transition from the CDM to the Article 6.4 mechanism?

How to ensure Article 6 contributes to the long-term targets of the Paris Agreement?

- How can the principle of “overall mitigation in global emissions” be operationalised?
- What role does the private sector play in Article 6? Can it purchase and use generated mitigation outcomes in the context of the voluntary carbon market or non-UNFCCC compliance schemes such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)? What safeguards are needed and how can accountability be assured?
- What is the ultimate purpose of the framework for non-market approaches? How can the work programme be implemented best to identify and promote suitable approaches that promote mitigation and adaptation?

How to implement the modalities for cooperation in the respect of both objectives above?

- What are ITMOs and what are their defining characteristics? For instance, are they fungible carbon credits or an accounting unit valid in the context of a specific cooperative approach? What are their common characteristics in terms of principles or metrics they are expressed in?
- How to set baselines and test additionality in the context of the Article 6.4 mechanism and in the context of NDCs?
- How to account for ITMOs that were generated outside of the NDC of the host country?
- How to cover the administrative costs of market-based cooperation and how to provide funding for adaptation through a levy (“share of proceeds”) on market-based cooperation? Which approaches should be covered by the levy and should it be collected in cash or in kind?
- Does Article 6 focus on emission reductions, or also on removals or avoided emissions? What potential role is there for forestry projects and negative emissions technologies in general?
- Do we need a permanent institution/structure to oversee the implementation of the work programme for non-market approaches and if so, what will be its role and function?

At this stage of negotiations there is no obvious solution to the remaining political challenges and differences in positions and Parties need to identify compromises that do not endanger the integrity of the rule-set. Negotiations should be guided to incentivise ambition and action on the ground and political compromises should be thought through in terms of their technical feasibility. Solutions proposed should be practical and doable. Not everything will be adopted at this COP; a lot of technical work will have to be done in the next years. But Parties should agree on principles that can guide the technical implementation and address the key challenges that arise in the context of the diversity of NDCs. Only then, a clear signal will go out to actors that want to exploit the new opportunities for cooperation to mobilise investments and climate action.

A. LAYMAN'S GUIDE TO THE ARTICLE 6 NEGOTIATIONS

International market mechanisms have been contentious from the beginning of negotiations under the UN Framework Convention on Climate Change (UNFCCC) in the early 1990s. Nevertheless, it was possible to agree on three such mechanisms under the Kyoto Protocol: the Clean Development Mechanism (CDM); Joint Implementation; and international emissions trading.

These mechanisms, especially the CDM, were used intensively until the end of the first commitment period of the Kyoto Protocol in 2012. However, since 2011, they suffered from a steep decline of the prices for emissions credits due to a decline in demand while supply was rising. This decline in demand had several reasons, including: a lack of ambition of the mitigation targets in the second commitment period of the Kyoto Protocol; criticisms of the CDM regarding additionality; perceived lack of sustainable development benefits; inequitable regional distribution; high transaction costs; CDM credit import restrictions in the EU after 2012; and the continuing uncertainty about the scope and eligibility of carbon market activities in the post-2020 climate regime.

In the aftermath of the failed 2009 Copenhagen climate conference, the 2010 Cancun conference provided a mandate to negotiate a successor agreement to the Kyoto Protocol. In the negotiations that followed, discussions on “new market mechanisms” and a “framework for various approaches” were stalled for several years. It therefore came as a big surprise that the Paris Agreement included a full Article on market- and non-market cooperation with three distinct components.

Article 6 regulates the modalities of voluntary cooperation among Parties to promote mitigation ambition as well as sustainable development. It contains two market-based and one non-market approaches: Parties can engage in bilateral or multilateral “cooperative approaches” when implementing their Nationally Determined Contributions (NDCs), and have to account for their activities and on the transfers of “internationally transferred mitigation outcomes” (ITMOs) in accordance with UNFCCC guidance (Article 6.2).

Parties can also authorise activities to be implemented in their country under the auspices of an UNFCCC-governed baseline and credit mechanism which will result in emission reduction credits (A6.4ERs) that can be acquired by other Parties while promoting sustainable development (Article 6.4). The Article 6.4 mechanism is thus informed by existing experience with UNFCCC-governed market mechanisms such as the CDM and JI.

Furthermore, Parties can cooperate in mitigation and adaptation under a non-market approach (Article 6.8) that is not based on the transfer of mitigation outcomes. This approach was brought into Article 6 by those countries that are sceptical of market mechanisms.

A.I Brief history of the negotiations since 2016

After the entry into force of the Paris Agreement in 2016, COP22 (also CMA1), decided that the detailed implementation rules, the so-called “Paris Agreement Rulebook” should be developed and agreed before the end of 2018. Given that 55 countries indicate in their NDCs that they want to use international market mechanisms, and 35 countries are considering this option, interest in market mechanisms is high. Nevertheless, the technical complexity of negotiations and political sensitivity of using market mechanisms slowed down the negotiation process.

At COP23, the chair of the Subsidiary Body on Scientific and Technological Advice of the UNFCCC (SBSTA) was tasked with developing a first set of informal texts on all three agenda items:

- Guidance for cooperative approaches, referred to in Article 6.2
- Rules, modalities and procedures for the mechanism established by Article 6.4
- A work programme under the framework for non-market approaches referred to in Article 6.8

New versions of the informal texts, capturing progress in negotiations, were produced ahead of the interim subsidiary body meeting in September 2018 as well as ahead of COP24 in Katowice, where finally a draft negotiation text was developed in the first week of negotiations under SBSTA and submitted to the CMA. In the second week of negotiations, the Katowice Presidency published several iterations of text, trying to identify bridging solutions, options for deferral to subsequent sessions and trying to remove brackets for the most contentious provisions. However, no agreement could be found. Thus, Article 6 remained a “glaring gap” of the Paris Agreement rulebook and was deferred to COP25 in December 2019. A procedural decision was taken that referred to the first version of the draft negotiation text submitted by SBSTA (“SBSTA text”) as well as the latest text published by the Katowice Presidency (“Presidency text”) to be the basis for the finalisation of the negotiations.

At the 50th meeting of the Subsidiary Bodies in June 2019 (SB50), the Parties negotiated under SBSTA in order to consolidate a basis of negotiations in one text. First, Parties identified key issues they felt needed further discussions. Subsequently, these issues were clustered and addressed in informal negotiations. At the end of the negotiation session, the co-facilitators presented three texts – for Article 6.2, 6.4 and 6.8 respectively – bringing together the Presidency text, elements from the SBSTA texts as well as new proposals and wordings suggested during the Bonn session. Parties had the chance to comment if the text reflected their proposals and preferences, before they adopted the three texts as a basis of negotiations for COP25.

A.2 Key outstanding issues in the Article 6 negotiations

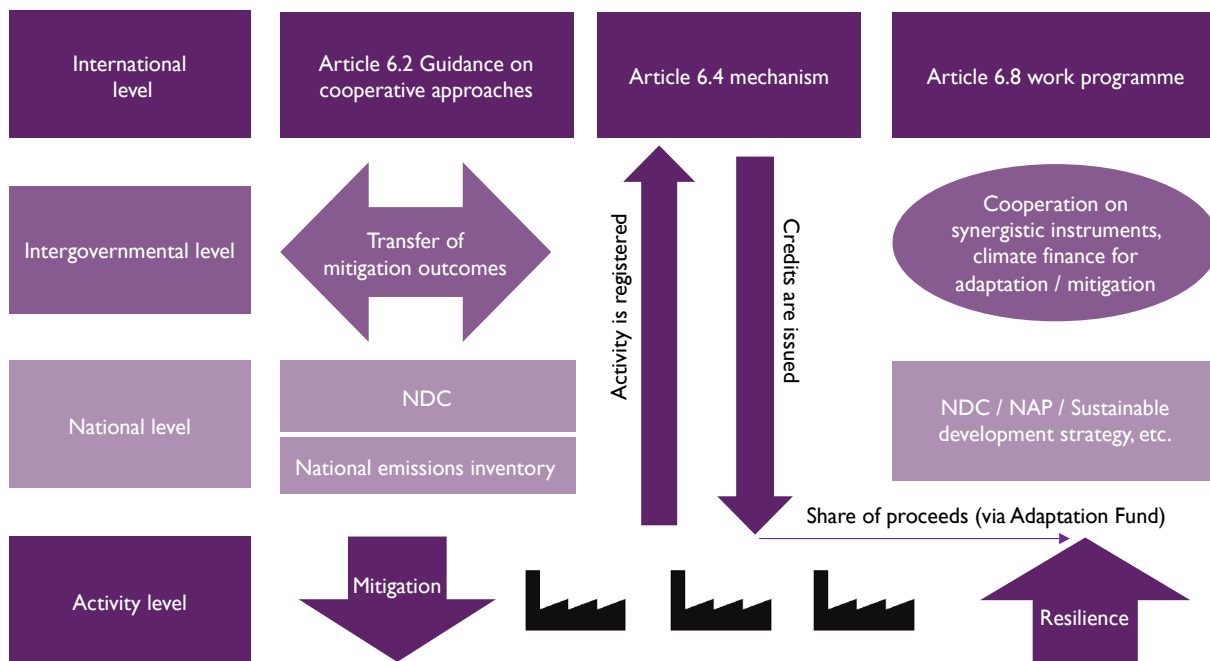
The past negotiations have allowed to identify a limited number of “crunch issues”. In order to agree on an outcome, negotiators need to fully understand these issues and the key differences between negotiating Parties. This, we hope, will aid the development of “bridging proposals” or proposals to “exchange” outcomes in different fields.

This document explains the crunch issues and positions of Parties – we have benefited from significant inputs by senior negotiators. Through concise and accessible language, we want to nurture understanding as a key step necessary to identify compromises in these highly political as well as complex negotiations. We aim at heads of delegations who will be confronted with the need to rapidly identify political solutions for technically challenging issues as well as interested lay persons.

The rules for Article 6 must be set in a way that they ensure the environmental integrity of cooperation, including the avoidance of double counting of mitigation and transparent recording of its results. They must address multiple levels of governance and action, as shown in **Figure 1**.

Negotiators had to deal with strong technical as well as political linkages to the negotiations on ensuring transparency, guidance on the formulation and reporting on NDCs, and accounting for climate finance. For all these topics, COP24 was able to take decisions. Within [Decision 18/CMA.1](#) on the enhanced transparency framework (ETF), some reporting requirements for Parties that transfer and acquire ITMOs are already enshrined in paragraph (§) 77(d). This paragraph specifies that “corresponding adjustments”, which are the subtraction of sold ITMOs from national emission balances and additions of acquired ITMOs, must be made for both use of ITMOs towards NDCs as well as for other purposes. The latter is widely seen as including

Figure 1: International cooperation approaches under Article 6

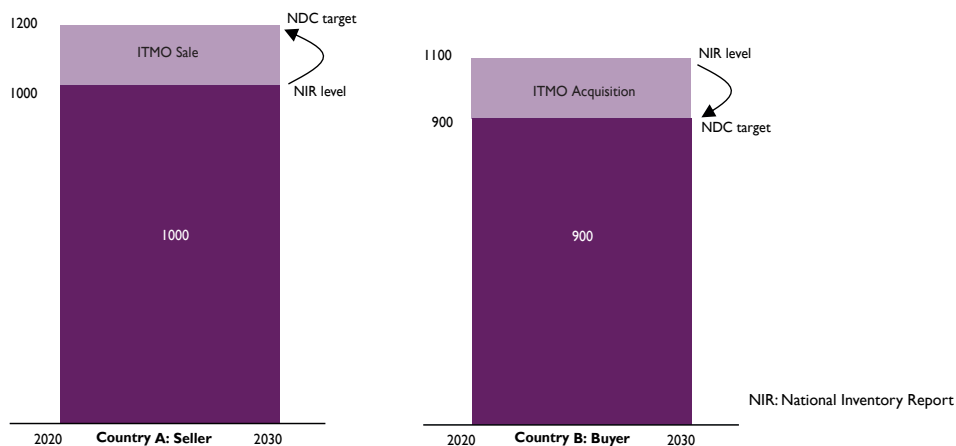


offsetting schemes outside the UNFCCC like the international aviation scheme CORSIA or voluntary carbon markets. However this interpretation is not shared by all. Some Parties highlight that other purposes only refers to other international compliance obligations. Parties are required to report the annual levels emissions and removals covered by the NDC and apply corresponding adjustments to the balance of emissions and removals, i.e. an “inventory-based” form of accounting (see discussion in Section B.1). A simplified example for such corresponding adjustments is provided in **Table 1**, and graphically illustrated in **Figure 2**.

Table 1: Simplified annual adjusted emissions balance of countries involved in Article 6 (in MtCO₂)

Country	National emissions	National removals by sinks	ITMO acquisitions	ITMO transfers	Emissions balance
Party A (Transferring Country)	+1000	-500	0	+300	800
Party B (Acquiring Country)	+2000	-200	-300	0	1500

Figure 2: Corresponding adjustments based on Decision 18/CMA.I,§77(d)



Parties need to report how the cooperative approach promotes sustainable development, ensures environmental integrity, and transparency, with explicit reference to governance and the avoidance of double counting. Some Parties consider these elaborate reporting requirements to be a “safety net” for accounting for the transfers of ITMOs under Article 6. However, the standing of this paragraph in the absence of a decision on Article 6 is heavily contested. Parties agreed that any decision taken with regard to Article 6.2 would supersede the provisions of §77(d).

The general linkages between Article 6 and other provisions of the Paris Agreement rulebook are illustrated in **Figure 3**.

Figure 3: Key linkages between Article 6 and other elements of the Paris rulebook

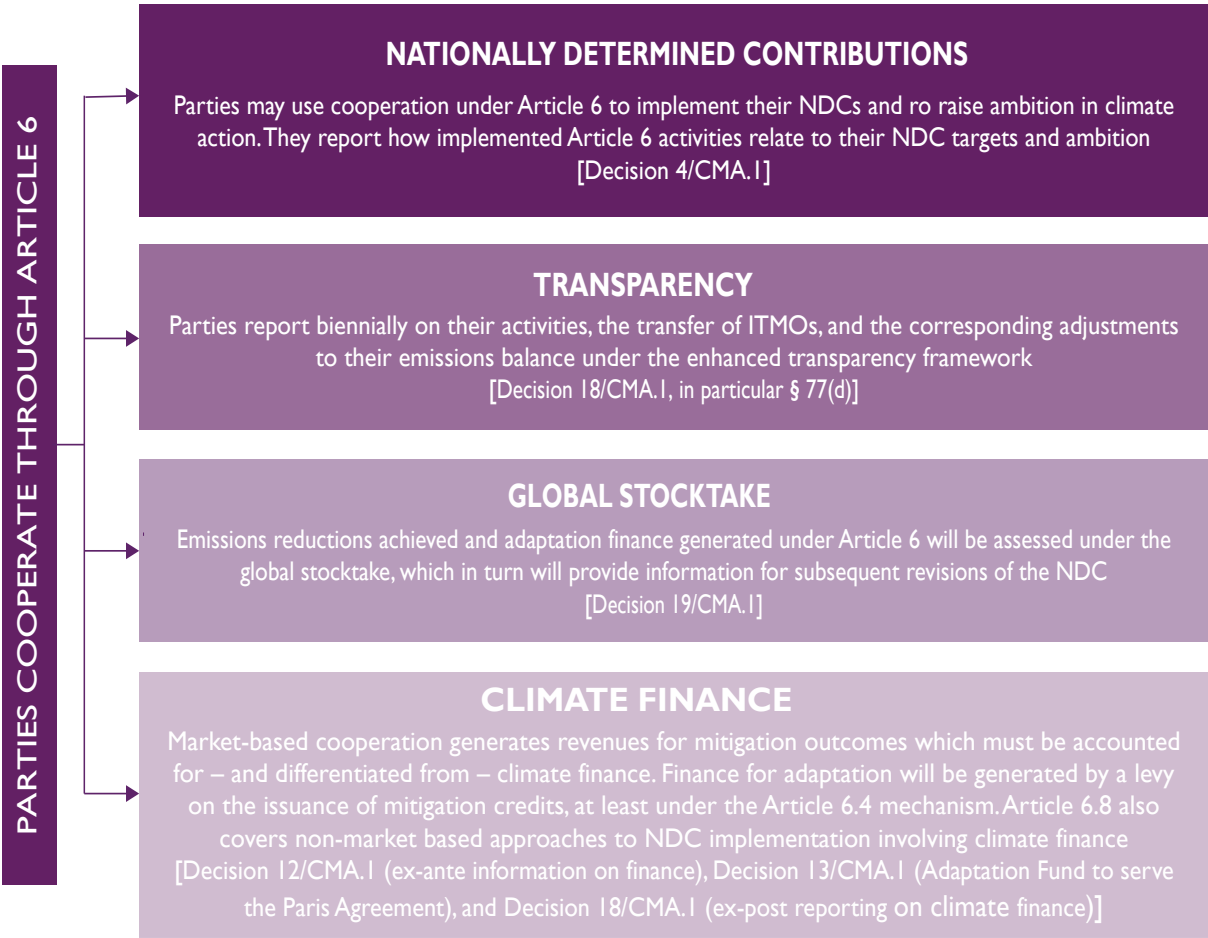
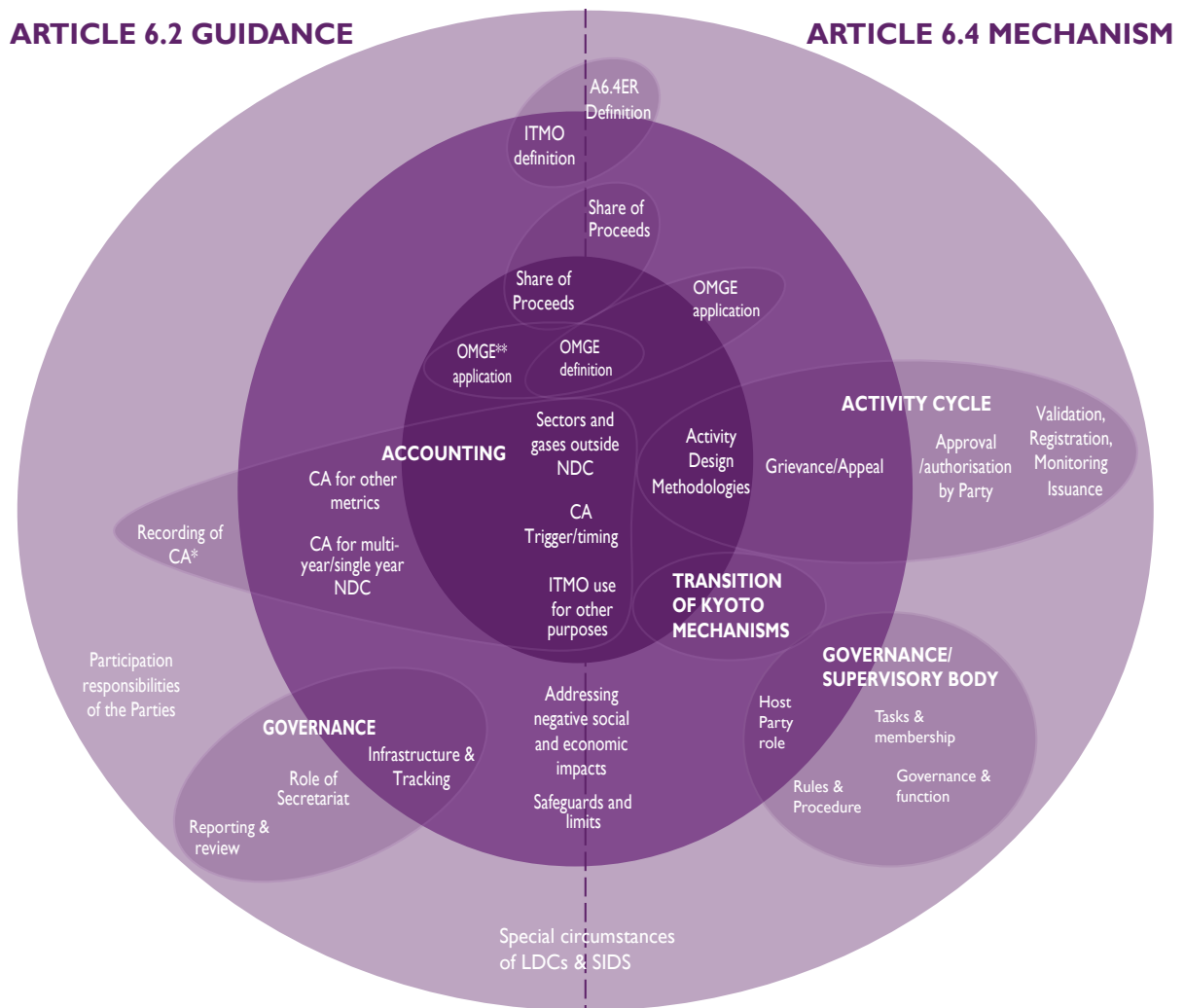


Figure 4 shows the overall status of negotiation issues related to Article 6.2 and 6.4 in the run up to the Subsidiary Bodies meeting in June 2019.

Figure 4: The landscape of negotiation issues for Article 6.2 and 6.4



*CA – Corresponding adjustment **OMGE – Overall mitigation of global emissions

The dark purple in the middle shows heavily contentious issues, the lighter purple shows somewhat contested ones, and the lightest purple on the outside shows issues where there was a general consensus at COP24, not contested at SB50. It is, however, possible that consensual issues will again become contentious as Parties try to optimise their negotiation positions.

In Section B, we describe the critical negotiation issues for the two market approaches under Article 6.2 and 6.4, before addressing the non-market approaches under Article 6.8 in Section C.

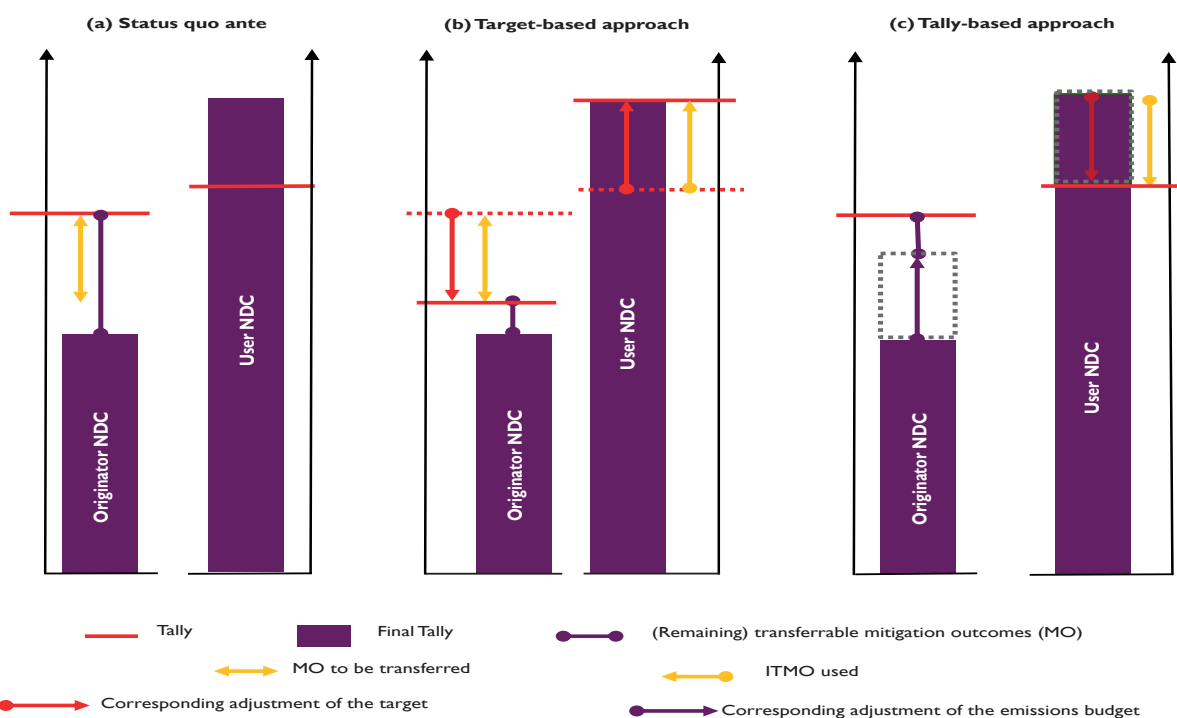
B. EMERGING FEATURES OF ARTICLE 6 APPROACHES

B.1 Article 6.2: Accounting framework for ITMOs

Parties are granted a large degree of flexibility in the choice of designing and implementing “cooperative approaches” as these are not subject to CMA oversight, but just “guidance”. They can thus encompass a very broad set of possible activities, ranging from crediting mechanisms that support single projects or programmes of activities but are being governed outside of the UNFCCC to mitigation policies (such as carbon taxes, emissions trading system, or feed-in tariffs), or even sectoral approaches where mitigation achieved in a whole sector is considered. Moreover, regional implementation of policy instruments such as the linking of emission trading systems could be envisaged as a form of cooperation under Article 6.2. Emission reductions achieved can be transferred across borders as ITMOs.

Accounting for ITMO transfers will have to be done according to UNFCCC rules. According to Article 6.2, Parties shall ensure environmental integrity when transferring ITMOs. While there is no formally established definition, at the very minimum, environmental integrity requires that international cooperation should not lead to an overall increase in emissions. In a stringent interpretation it would even require that international cooperation must contribute to an overall decrease in emissions. The strongest risk to environmental integrity is created through double counting of mitigation outcomes. This occurs when mitigation is credited twice, when the same credit is sold twice or used twice, or in general, when the same mitigation is counted toward two separate international mitigation pledges. Therefore, when a mitigation outcome is transferred internationally to be counted toward another mitigation pledge, it must be “un-counted” by the host Party that agreed to transfer it. Such “corresponding adjustment” means that upon transfer of mitigation outcomes an adjustment must be made that reflects that change against either the NDC target or the emissions inventory (here “tally”), see **Figure 5**.

Figure 5: Corresponding adjustments for mitigation outcomes



Source: Müller and Michaelowa (2019)

Under the Kyoto Protocol, a similar accounting approach was applied for trading under Joint Implementation between industrialised countries. In contrast to mitigation pledges under the Paris Agreement, industrialised countries under the Kyoto Protocol have top-down defined and quantified mitigation targets that cover the entire economy of the country and are expressed in CO₂ equivalents (CO₂e). Developing countries that sell emission credits achieved under the CDM have no mitigation obligations under the Kyoto Protocol and therefore nothing to account for. Emission reduction credits traded under Joint Implementation as well as the CDM are expressed in CO₂e. The Paris Agreement regime now requires all Parties to contribute to mitigating emissions, but Parties set their targets themselves in NDCs.

Given the heterogeneous nature of NDCs (at least in the first round) that include different types of targets, quantified or not, expressed in different metrics and cover different sectors and gases, building a solid accounting framework is not straightforward. The guidance needs to harmonise accounting in the context of:

- Different scopes of NDCs with economy-wide coverage vs. limitation to certain sectors
- Different types of NDC targets, which can be defined for multiple or single years during the NDC period. Some of them can be quantified ex-ante, others are only quantifiable ex-post:
 - absolute emission targets
 - emission targets relative to:
 - a base-year level
 - a static business-as-usual (BAU) scenario
 - a dynamic BAU scenario
 - intensity targets relating to GDP or other parameters
 - non-greenhouse gas (GHG) targets, for instance, relating to quantity of non-fossil or renewable energy, energy efficiency improvement, forest cover
 - policy/action targets, such as the introduction of a renewable electricity feed-in tariff
- Different metrics. These could take the form of CO₂e, or other units, such as energy units (GWh), installed renewable electricity production capacities (MW), etc.
- Different time frames for NDC implementation (given the deferral on the decision on common time frames)

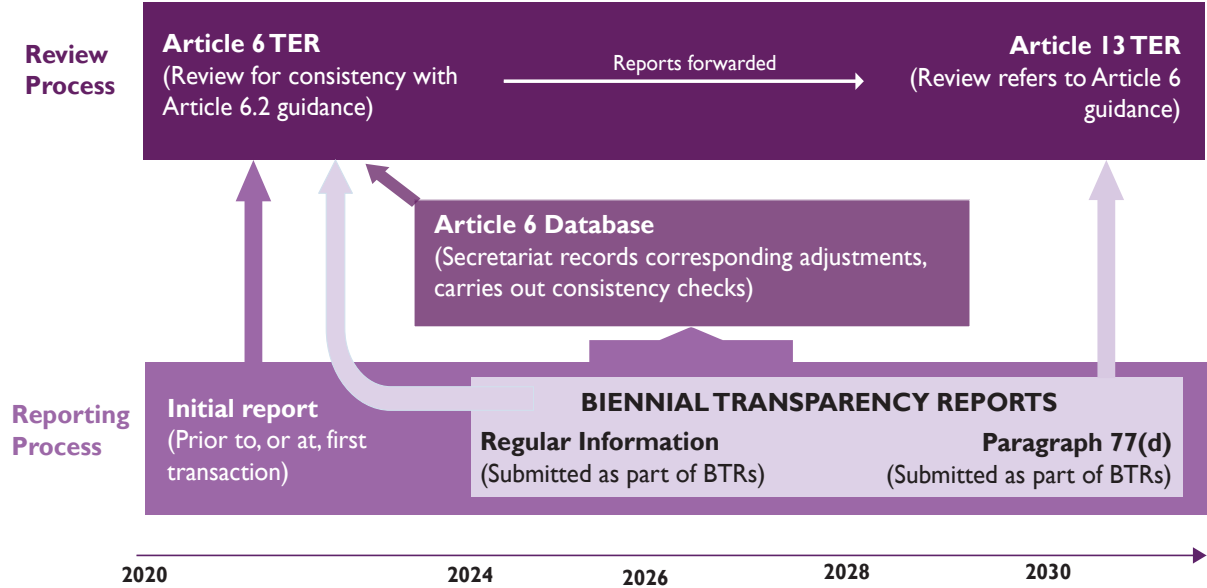
This diversity of NDCs is one of the fundamental challenges for accounting under Article 6.2 and influences nearly all the crunch issues presented in Sections C.2 and C.3.

At the centre of this issue lies a political decision that needs to be taken: can the guidance, rules, modalities, and procedures establish common characteristics for all cooperating Parties? Can the generation of ITMOs for instance be restricted to mitigation outcomes achieved and expressed in CO₂e, and can it be required that ITMOs are accounted against an NDC emissions budget that is also expressed in CO₂e? Or must the guidance respect the diversity in a way that it accommodates different approaches to expressing mitigation outcomes and accounting of those? Parties defending the first approach argue it is the easiest way to preserve environmental integrity, others argue that any decision restricting how Parties formulate NDCs would infringe upon the bottom-up nature of the Paris Agreement.

The guidelines on corresponding adjustments lie at the centre of the Article 6.2 guidance. But international oversight will most likely remain limited and thus environmental integrity can – if at all – only be ensured through transparency. Therefore, the effectiveness of Article 6.2 guidance is dependent on the reporting and review cycle on the activities and the international transfers. This cycle is closely linked to the reporting and review cycle under the ETF. As it is currently proposed in the negotiation text, Parties involved in cooperative approaches would submit initial reports as well as regular information that would then be compiled by the

UNFCCC secretariat, reviewed by an Article 6 technical expert review (A6TER) and subsequently forwarded to the technical review process under the ETF (see **Figure 6**).

Figure 6: The review and reporting cycle under Article 6.2 over time



Source: Perspectives Climate Group and Climate Focus (2019)

The exact modalities of this cycle and the implications for tracking and recording of information remain yet to be finalised. A key question is the kind of information the A6TER will be reviewing: only the quantitative information on the ITMO transactions, or also qualitative information on the underlying mitigation activities?

B.2 Article 6.4: UNFCCC-governed crediting mechanism

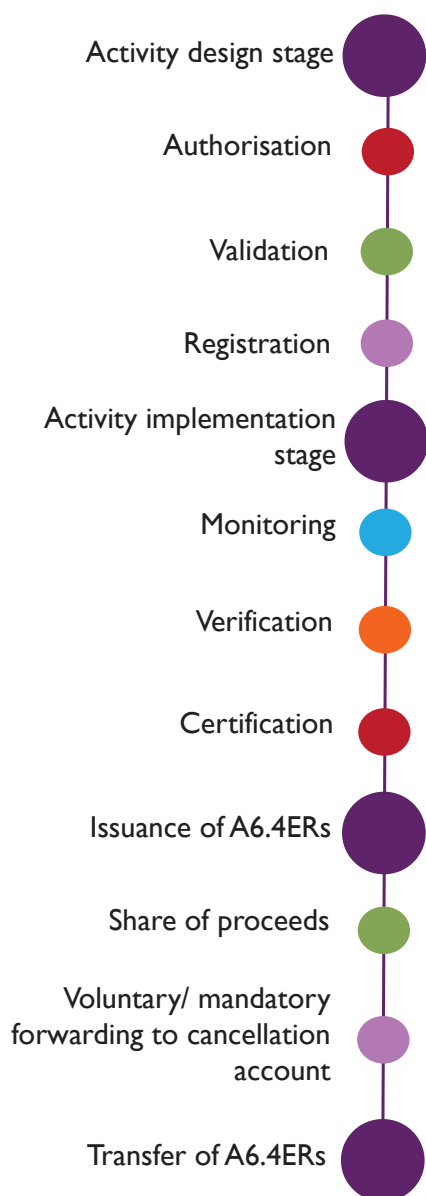
The Article 6.4 mechanism will operate under the guidance and authority of the CMA and be governed by a Supervisory Body that will oversee and approve the issuance of Article 6.4 emission reductions (A6.4ERs). The activity cycle of the Article 6.4 mechanism as currently discussed may share many similarities with the activity cycle of the CDM (see **Figure 7**).

The Supervisory Board will also approve the eligible methodologies for mitigation activities, in particular when it comes to the calculation of the baseline and determining the “additionality” of the activity.

Participants can propose activities, but these activities must be approved by the host country and validated by “designated operational entities” (DOEs), i.e. independent auditors accredited for this purpose. Activity implementers monitor the emission reductions achieved, which is verified by the DOEs. The A6.4ERs issued are transferred into the accounts of the activity implementers. Also, a levy (“share of proceeds”) for administration and adaptation purposes will be raised either at issuance or at international transfer, with the revenue for adaptation purposes allocated to the Adaptation Fund. A key difference to the CDM is that a grievance and appeal process is being proposed for the Article 6.4 mechanism.

Under Article 6.4, non-governmental stakeholders can implement activities, as long as they obtain the approval of the host country. The host country must have communicated an NDC and also a designated national authority (DNA) to serve as focal point to the mechanism. Furthermore, it must explain how the

Figure 7: The Article 6.4 activity sequence



activity relates to its NDC and promotes sustainable development. The extent of host countries' responsibilities and prerogatives is still being discussed.

The special circumstances of least developed countries (LDCs) and small island developing states (SIDS) will be considered when operationalising the exact modalities and procedures. These could mean in practice that these countries could be exempt or be provided flexibility (at least temporarily) with regard to some requirements that relate to the link of the activities to the NDCs, the setting of baselines, or the demonstration of additionality.

BOX 1: The concept of additionality

In generic terms, the concept of additionality stipulates that in the context of crediting mechanisms any mitigation activity needs to demonstrate that the activity (and thus the resulting mitigation) would not have happened in the absence of the revenue from the sale of emissions units created by the market-based mechanism. Additionality is important to prevent the generation of fictitious carbon credits and thus for ensuring environmental integrity and ensuring the efficient allocation of funds. Additionality has historically been checked through investment or barrier tests, which were subject to criticism of subjectivity. Recently, positive lists of technologies seen as automatically additional have gained ground.

B.3 Article 6.8: Promoting non-market approaches

The Article 6.8 work programme aims to implement a framework on non-market based approaches (NMAs). NMAs can take various forms and refer to mitigation, adaptation, finance, technology transfer, and capacity-building approaches. By definition, NMAs do not involve the transfer of mitigation outcomes from one country to another against payment (as Articles 6.2 and 6.4 do).

C. KEY FRICTION POINTS IN ARTICLES 6.2 AND 6.4

C.1 The linkage between Articles 6.2 and 6.4

The fundamental question underlying decisions on accounting for market-based cooperation is the following: *Are cooperative approaches under Article 6.2 and the 6.4 mechanism two distinct mechanisms for cooperation or are these two Articles complementary provisions?*

Following the understanding that Articles 6.2 and 6.4 refer to two distinct forms of cooperation, some argue that mitigation outcomes achieved through cooperative approaches are ITMOs while A6.4ERs issued by

Figure 8: Applicability of Article 6.2 guidance at different points of transfer of A6.4ERs

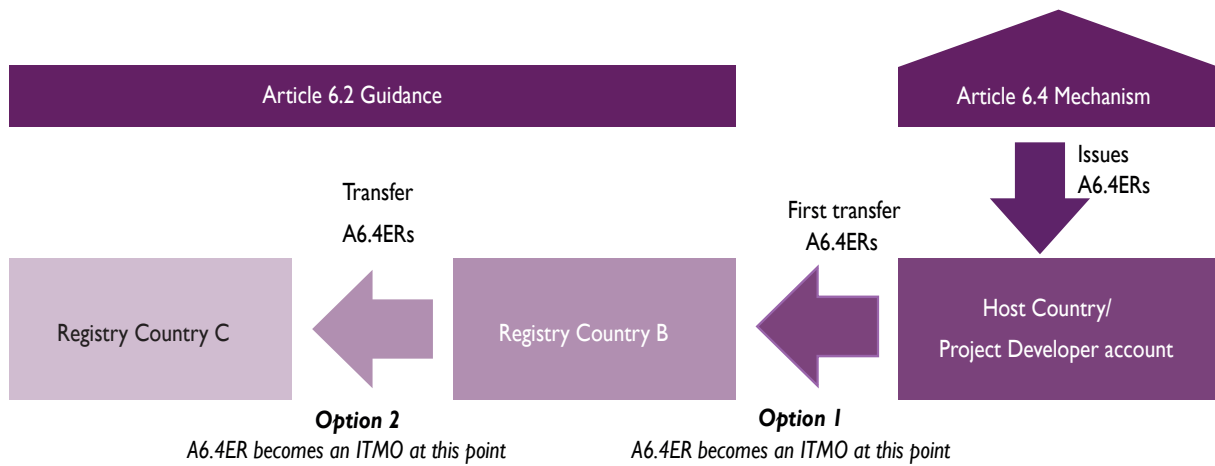
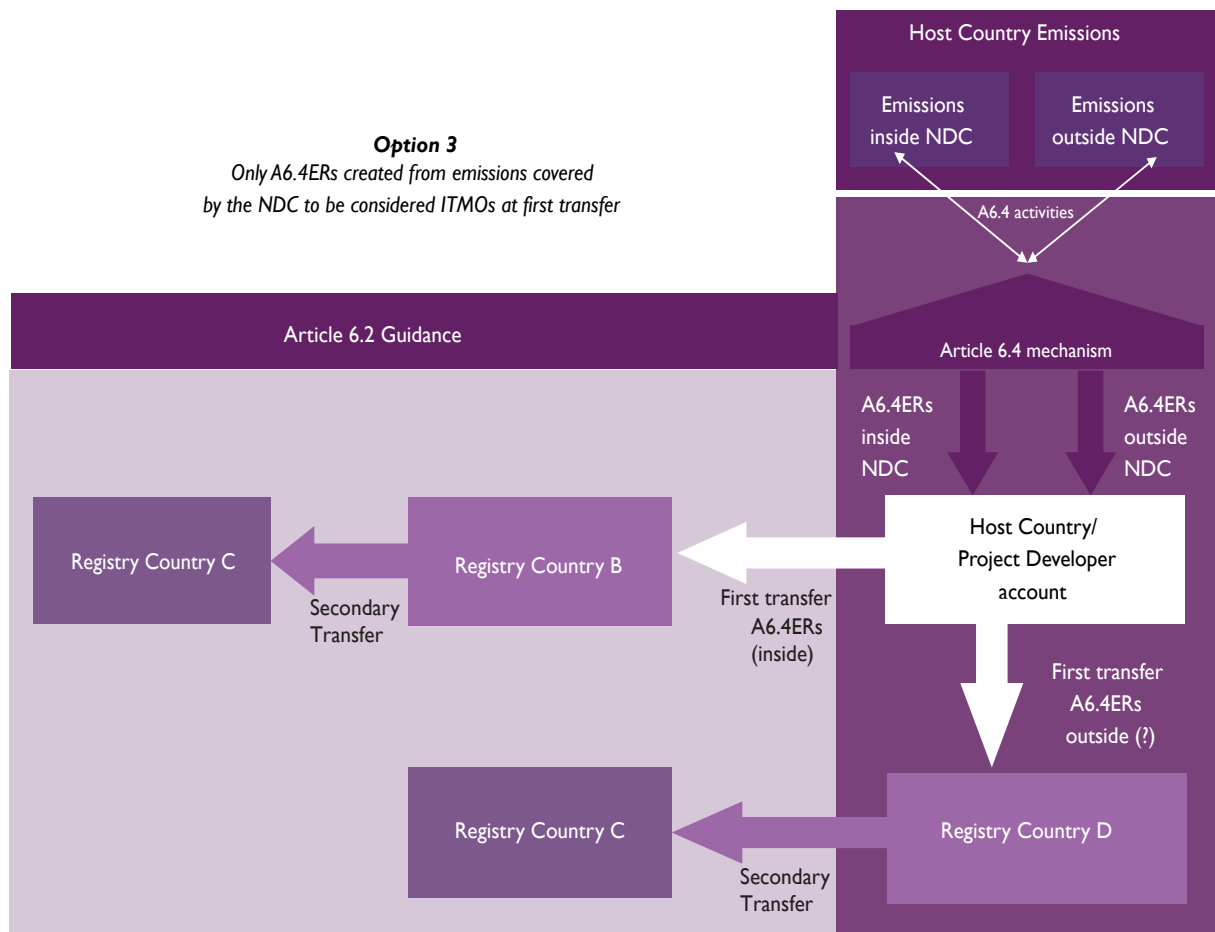


Figure 9: Applicability of Article 6.2 guidance to different origins of A6.4ERs



the Article 6.4 mechanism constitute a separate form of mitigation outcomes. Defenders of this approach highlight that mitigation under the Article 6.4 mechanism must demonstrate additionality and thereby goes beyond the measures and policies adopted by the host Party to achieve the NDC. Therefore, the transfer of the mitigation outcome from the mechanism's registry to a national account should be exempt from corresponding adjustments, and the guidance on the accounting of ITMO transfers would also only apply if A6.4ERs are traded a second time. In short: the first transfer of A6.4ERs from the mechanism's registry to a buying Party would not be considered an ITMO transfer. The supporters of the complementary interpretation argue A6.4ERs become ITMOs as soon as the mitigation outcome is transferred outside of the host country jurisdiction, which includes the first transfer from the mechanism to the buying Parties' account. Others say A6.4ERs only become ITMOs if covered by the host country's NDC (for the general issues related to the accounting for mitigation outcomes not covered by the NDC, see below).

C.2 Common issues under 6.2 and 6.4

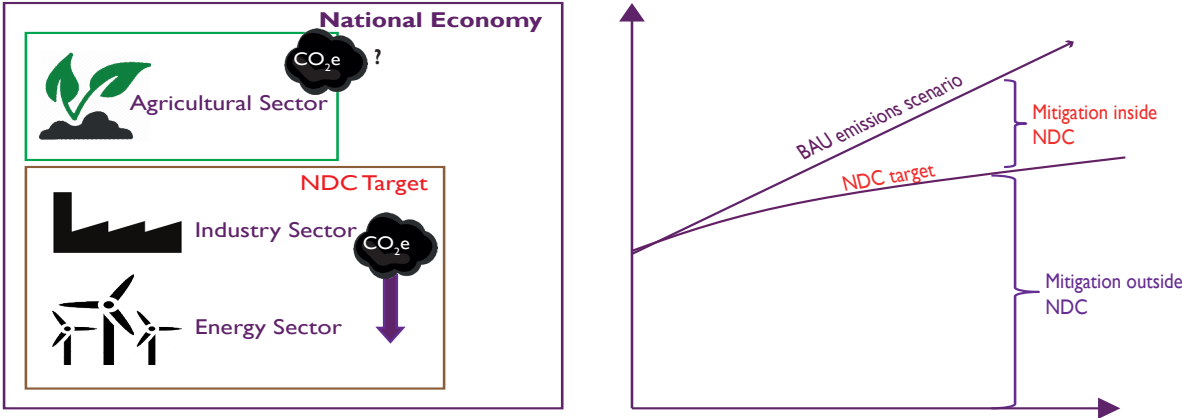
C.2.1 Accounting for mitigation outcomes not covered by the NDC

Many NDCs only cover specific sectors of the economy (for instance, the energy sector), whereas other sectors are excluded due to lack of data and inability to mobilise mitigation action there, particularly by lower income developing countries, LDCs, and SIDS. The same is true for types of GHGs (CO₂, N₂O, CH₄, HFCs, etc.). As the Paris Agreement aims at the introduction of economy-wide targets by Parties over time, it is expected that sectors and gases already covered by the NDCs would continue to be covered in revised NDCs while new sectors and gases would be added over subsequent revision cycles.

A crunch issue in Article 6 negotiations is whether mitigation achieved in sectors or regarding gases not covered by/ "outside" of the NDC can be transferred out of the country and whether the country then has to undertake a corresponding adjustment. A first precondition to finding a common understanding on this issue is to define what "not covered by the NDC" / "outside NDC" means.

The most common interpretation of "not covered by the NDC" is a reference to sectors or gases that are not considered in NDCs and related NDC targets (see **Figure 10**, left). Some put forward another, conceptually completely different definition of "outside" NDC, as referring to any action going beyond the actions required to meet the NDC targets. This would include sectors and gases not mentioned in the NDC, but also any mitigation activities that go beyond what would happen in the context of NDC implementation (see **Figure 10**, right).

Figure 10: Two possibilities to define "outside" NDC



With regard to the first interpretation of “outside”, Parties in favour of allowing for mitigation transfers from sectors not covered in the NDC argue that this would raise mitigation ambition as the underlying mitigation action was not foreseen in any NDC. Also, it would build the capacities of the host countries so the sector can be included in future revisions of the NDC. Moreover, it would be a logical continuation of the CDM approach. Parties opposing this argue that allowing for crediting in non-NDC sectors would provide a disincentive to Parties to expand their NDC over time and move towards economy-wide targets. They also argue that corresponding adjustments are a necessary safeguard against so-called “hot air”, i.e. overstated mitigation outcomes to be traded internationally. With regard to the second interpretation, the general eligibility for transfer of ITMOs from “outside” activities is not contested.

With regard to the first interpretation of “outside” and the need to apply a corresponding adjustment, many developing countries oppose this. They argue that if the transferring country would have to undertake a corresponding adjustment, it would be treated as if the sector was already covered by the NDC and thus it would need to enhance action in sectors covered by the NDC in order to comply with its pledges. With regard to the second interpretation, proponents of the need for a corresponding adjustment see the corresponding adjustments as necessary to prevent double counting of the mitigation on a global level. Opponents to the need for a corresponding adjustment argue that the activity “outside” is additional and thus would not have

Figure 11: Option 2 for "outside the NDC" ITMOs - imposition of corresponding adjustments

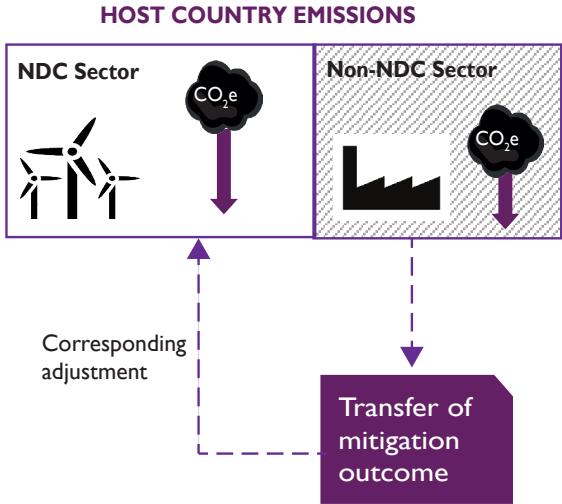
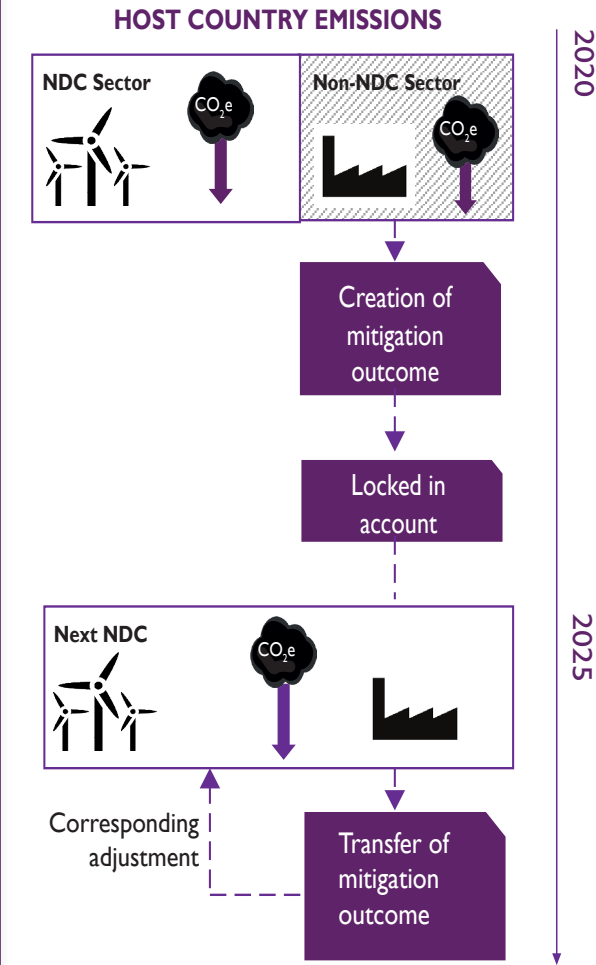


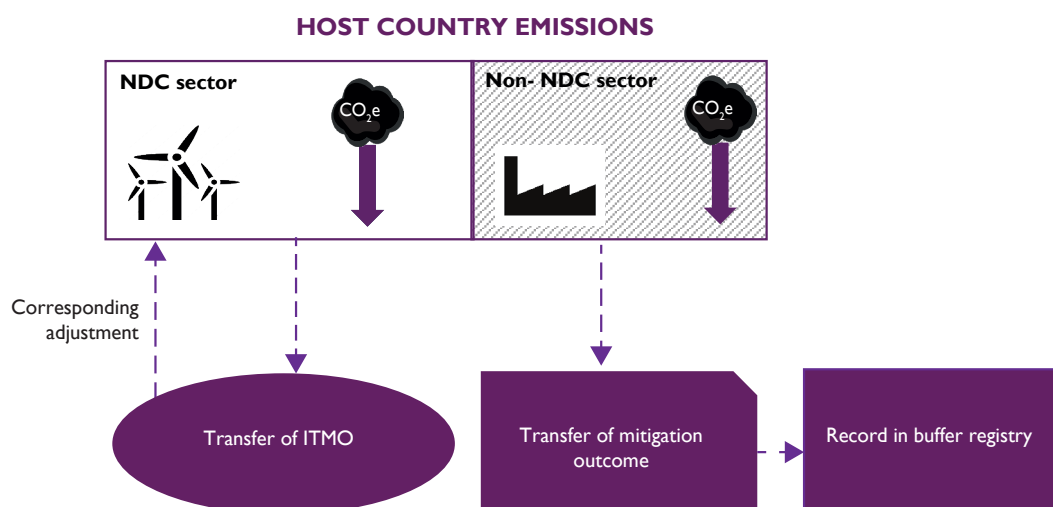
Figure 12: Option 3 for ITMOs from sectors/gases not covered by the NDC - locking credits



happened under BAU. There are several options how to treat this particular question, listed here from the most restrictive to the most permissive one:

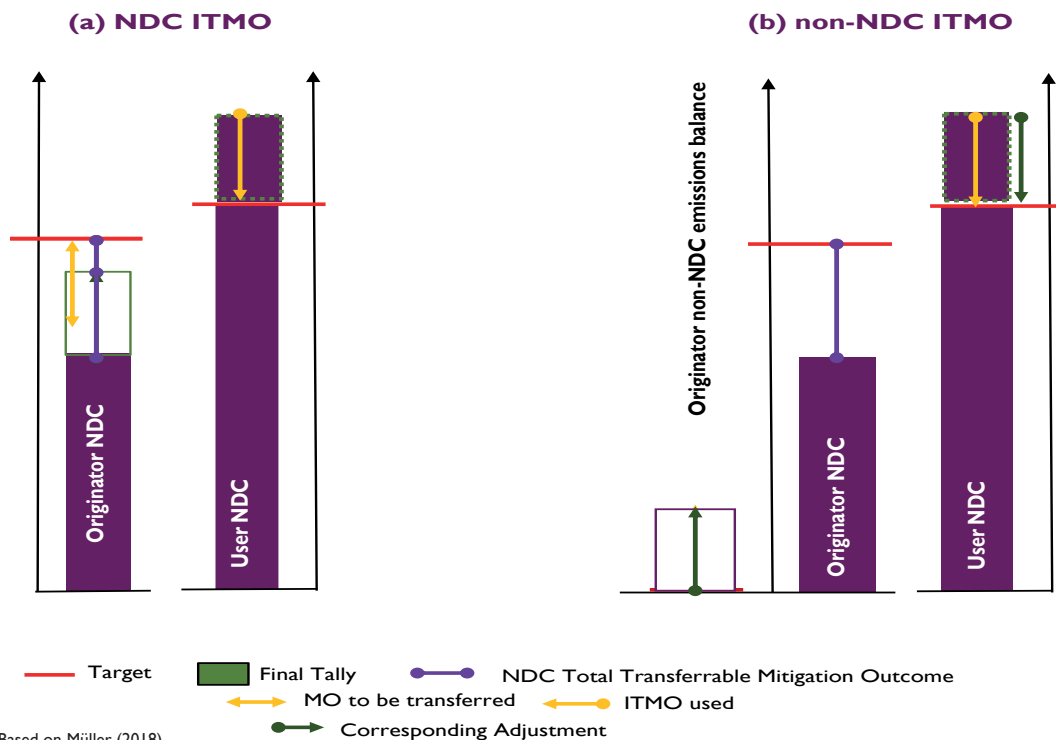
1. Not allow ITMO transfers from sectors/gases not covered by the NDC (first interpretation only)
2. Allow for ITMO transfers from activities “outside of” the NDC, but impose corresponding adjustments on such transfers (both interpretations).
3. Make ITMOs from sectors/gases not covered by the NDC temporarily unavailable in a “lock-in registry”. They would become transferable only once the NDC has been expanded and an ex-post corresponding adjustment to an emission balance and the NDC can take place (first interpretation only).
4. Allow for ITMO transfers from sectors/gases not covered by the NDC but impose corresponding adjustments after a transition period (both interpretations).
5. Allow for ITMO transfers from “outside” the NDC but record these transfers in a parallel or “buffer” registry in order to preserve transparency and accountability. The buffer registry would ensure international oversight on the scale of mitigation mobilised outside (both interpretations). In this option, transfers of mitigation outcomes from outside the NDC would be recorded separately and corresponding adjustments would be made to a “shadow” account, which would ensure they do not get “lost” and remain unaccounted for in the context of the overall action to achieve the Paris Agreement targets. However, this would only work if corresponding adjustments are made against an emissions budget or balance, as it is currently being discussed and is anchored in the transparency decision. In case target-based accounting is pursued, no adjustments could be made to outside-NDC emissions which would be not subject to a target.
6. Allow for ITMO transfers from sectors/gases not covered by the NDC without corresponding adjustments. Some Parties argue that while crediting for mitigation outside the scope of NDCs should not be eligible in cooperative approaches due to concerns to environmental integrity and perverse incentives (see discussion in Section B.2.5), it should be eligible under Article 6.4. This is defended by the fact that under the Article 6.4 mechanism, activities will have to prove their additionality and baselines for crediting will be set according to international rules. This resonates with the second interpretation of “outside NDC” meaning going beyond NDC targets. Here, again, there are several accounting options:
7. In case A6.4ERs are considered ITMOs, allow for their transfer from sectors/gases not covered by the NDC without the necessity to apply corresponding adjustments, as under the Article 6.4 mechanism activities must demonstrate that they represent “additional” emission reductions, which would limit the perverse incentive to transfer out an excessive amount of ITMOs from sectors not covered (see **Figure 13**).

Figure 13: Option 5 for ITMOs from “outside the NDC”– the buffer registry



8. When mitigation activities in sectors not covered are allowed, Parties must apply the Article 6.2 guidance when the A6.4ERs are transferred out of the country in order to safeguard against the perverse incentive not to expand NDCs.

Figure 14: Emission ('tally') based accounting for ITMOs from inside and outside the NDC in the context of options 4 and 5



C.2.2 Allowing for other uses than NDC implementation

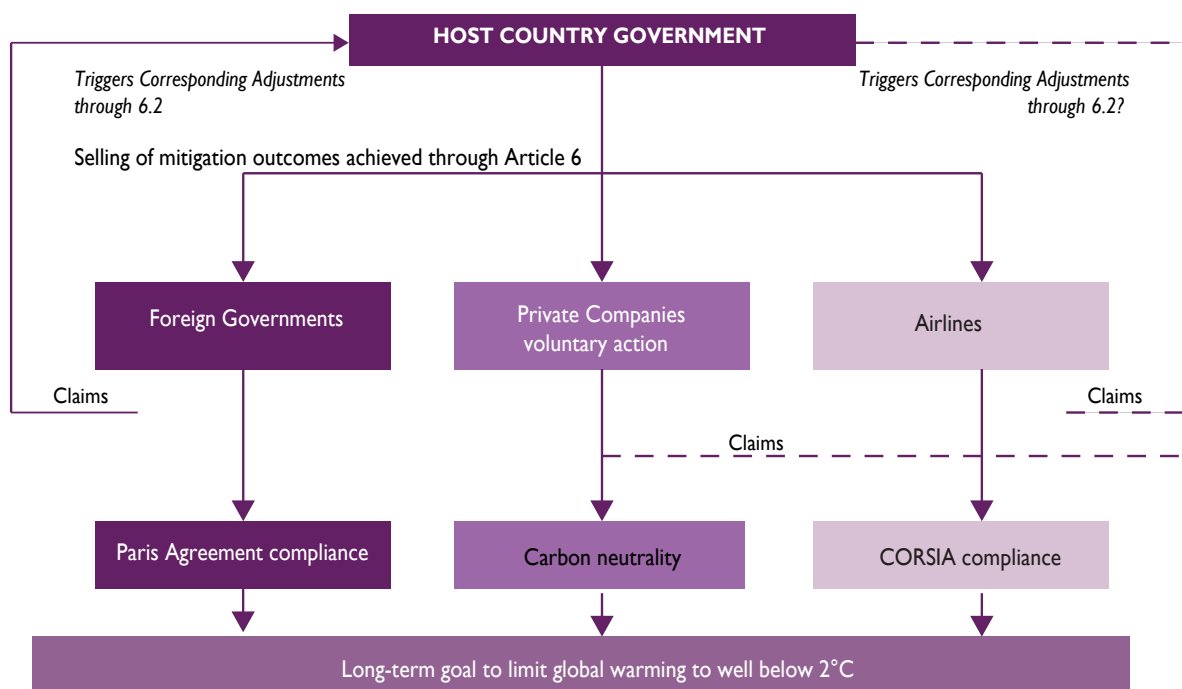
The predecessor of the Article 6.4 mechanism, the CDM, issues Certified Emission Reductions (CERs) that can be internationally acquired, traded, or cancelled by any stakeholder, including banks, companies or even individuals. The biggest short-term source of demand for international credits under Article 6 is expected to arise, for instance, from airlines that need to offset part of their emissions under CORSIA. Another source of demand could be private companies that want to claim the carbon neutrality of their products or activities through the “voluntary carbon market”.

The question is now whether ITMOs and A6.4ERs can at all be used outside of the NDCs and whether such use will trigger corresponding adjustments by the host country of the activity.

Some Parties highlight that not undertaking corresponding adjustments here would result in a double claiming of emission reductions by actors and not be in line with the spirit of the Paris Agreement to raise mitigation ambition and decrease the overall level of emissions. Therefore, as soon as a non-governmental actor “uses” an ITMO either by handing it in as a proof of compliance under another mitigation scheme or by claiming a voluntary mitigation, the ITMO would need to be permanently cancelled while the host country undertakes a corresponding adjustment.

Resolving this issue is also closely linked to the question of eligibility of mitigation outcomes covered by the NDC. For example, assuming that mitigation outcomes stemming from sectors not covered by an NDC would

Figure 15: Accounting for other uses of mitigation outcomes



be exempt from corresponding adjustments, airlines could acquire those and account them towards their compliance with CORSIA without double counting taking place.

C.2.3. Ensuring overall mitigation in global emissions

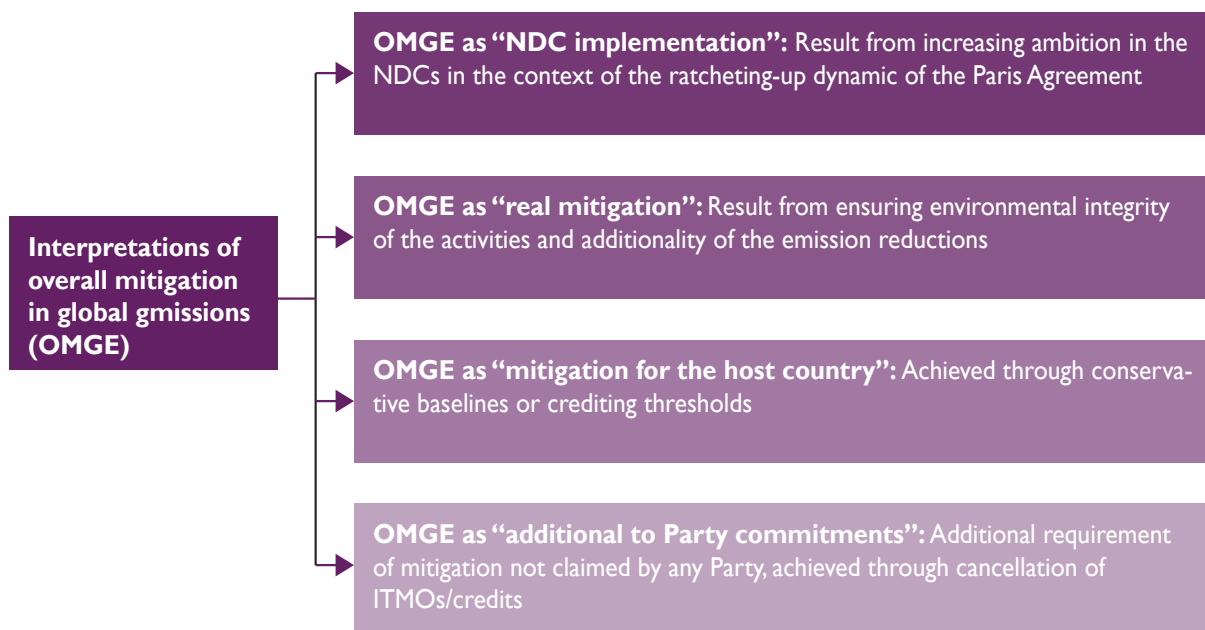
Article 6.4 mandates that the mechanism shall aim to deliver "overall mitigation of global emissions" (OMGE). However, Parties do not share the same understanding of this principle, which challenges its operationalisation. Three of the interpretation see OMGE as a "side benefit", either the general ambition increase of NDCs triggered by the availability of cheap ITMOs through Article 6, or the fact that additionality of activities under Article 6 or conservativeness of baselines is ensured by robust rules, The fourth one regards OMGE as an separate requirement that can be implemented through cancelling A6.4ERs.

The second interpretation would require stringent additionality tests for all activities under Article 6.

The third one means that baselines must be set conservatively (that is, underestimating the emission levels) or at least be constructed based on conservative default factors in their equations. The non-credited emission reductions would then be captured in the host country's national inventory report and support its NDC compliance.

The fourth interpretation would mean that a certain part of the emission reductions achieved would be cancelled, either mandatorily or voluntarily in the context of results-based climate finance. Supporters of mandatory cancellation argue that this alone would ensure a benefit for the atmosphere beyond Parties' targets and also benefit those Parties that are not participating in Article 6 mechanisms. Supporters of achieving OMGE through the voluntary cancellation of credits argue that this would ensure that the buying Parties carry the costs of cancellation, while the activity owner would have to carry the costs in the case of mandatory cancellation. Researchers stress that whether the seller or the buyer Party in the end would have to pay for the

Figure 16: Four interpretations of overall mitigation in global emissions (OMGE)



credits cancelled is dependent on the supply-demand balance on the market, with buyers paying for it if there is a demand overhang, and sellers paying if there is a supply overhang.

C.2.4 Charging a levy for adaptation and administrative expenses

An international levy on activities and/or mitigation outcomes generated by international market mechanisms (“share of proceeds”, or SOP) under the Article 6.4 mechanism will be charged to cover the administrative expenses of the mechanism and to support adaptation in developing countries. SOPs have already been raised under the CDM: 2% of credits issued are transferred to the Adaptation Fund (“in-kind” SOP) and a monetary fee had to be paid to the CDM Executive Board at the point of registration of an activity and issuance of credits (“monetary SOP”). Altogether, these charges have raised over US\$ 350 million (monetary) and US\$ 200 million (in kind) to date. With the Doha Amendment, the adaptation SOP was extended to Joint Implementation and international emissions trading in the second commitment period of the Kyoto Protocol, but as the amendment has not entered into force, this provision has not triggered any SOP.

The question of whether the SOP will be applicable to ITMO transfers under Article 6.2 is highly contentious. The silence of the Paris Agreement on the applicability of an SOP for Article 6.2 is being interpreted differently, with some Parties stressing that there is no mandate to introduce an additional levy, and other Parties stressing that silence does not impede the CMA to adopt decisions in this regard. Some Parties are opposed to a SOP for Article 6.2 activities as they assert that this would represent a disincentive for cooperative approaches, and it would not be technically feasible for linking emissions trading schemes (at least not for an “in-kind” SOP). Other Parties support the SOP for Article 6.2 as they want to ensure sufficient funding for adaptation and an equitable contribution to it by all Parties. They also share the concern that the Article 6.4 mechanism might be disadvantaged if the SOP is not applied to “competing” bilateral cooperative approaches under Article 6.2.

So far, only the SOP for adaptation purposes has been discussed in the context of the guidance on Article 6.2. However, the maintenance of the Article 6 database, the organisation of the A6TER, the provision of a registry to track ITMOs and related tasks for the Secretariat will generate administration costs that are currently

not considered. Also host countries will face administrative costs for the implementation of cooperative approaches.

When designing a SOP for both under Articles 6.4 and 6.2 is discussed, an important question is the point where it is levied. Under 6.4, at the point of the issuance of credits would be the easiest option. However, under Article 6.2, there is no international issuance. Either the SOP can be levied at the point of the international transfer for both mechanisms, or two different points of levy can be agreed for 6.4 and 6.2 (see **Figures 17 & 18**).

Figure 17: Potential points of levying the SOP under Article 6.4

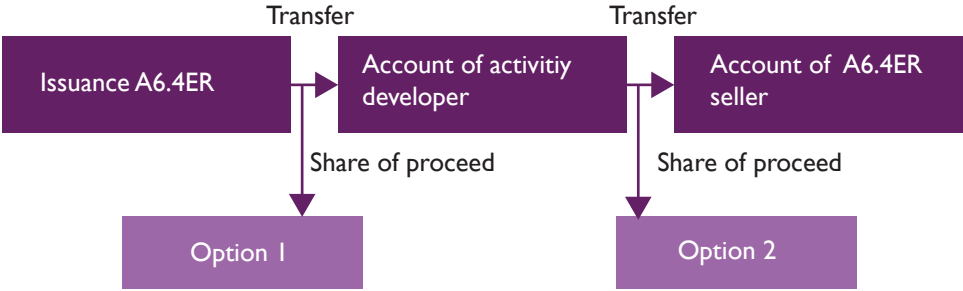
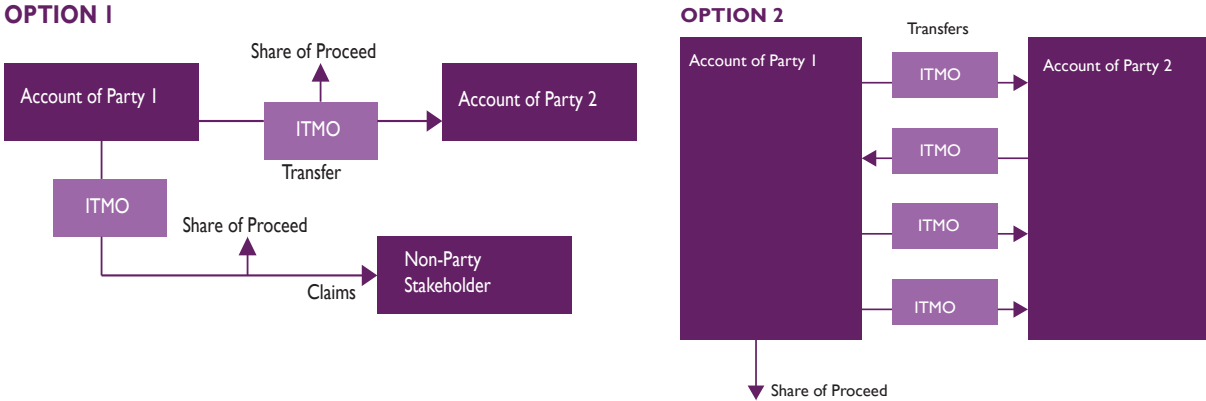


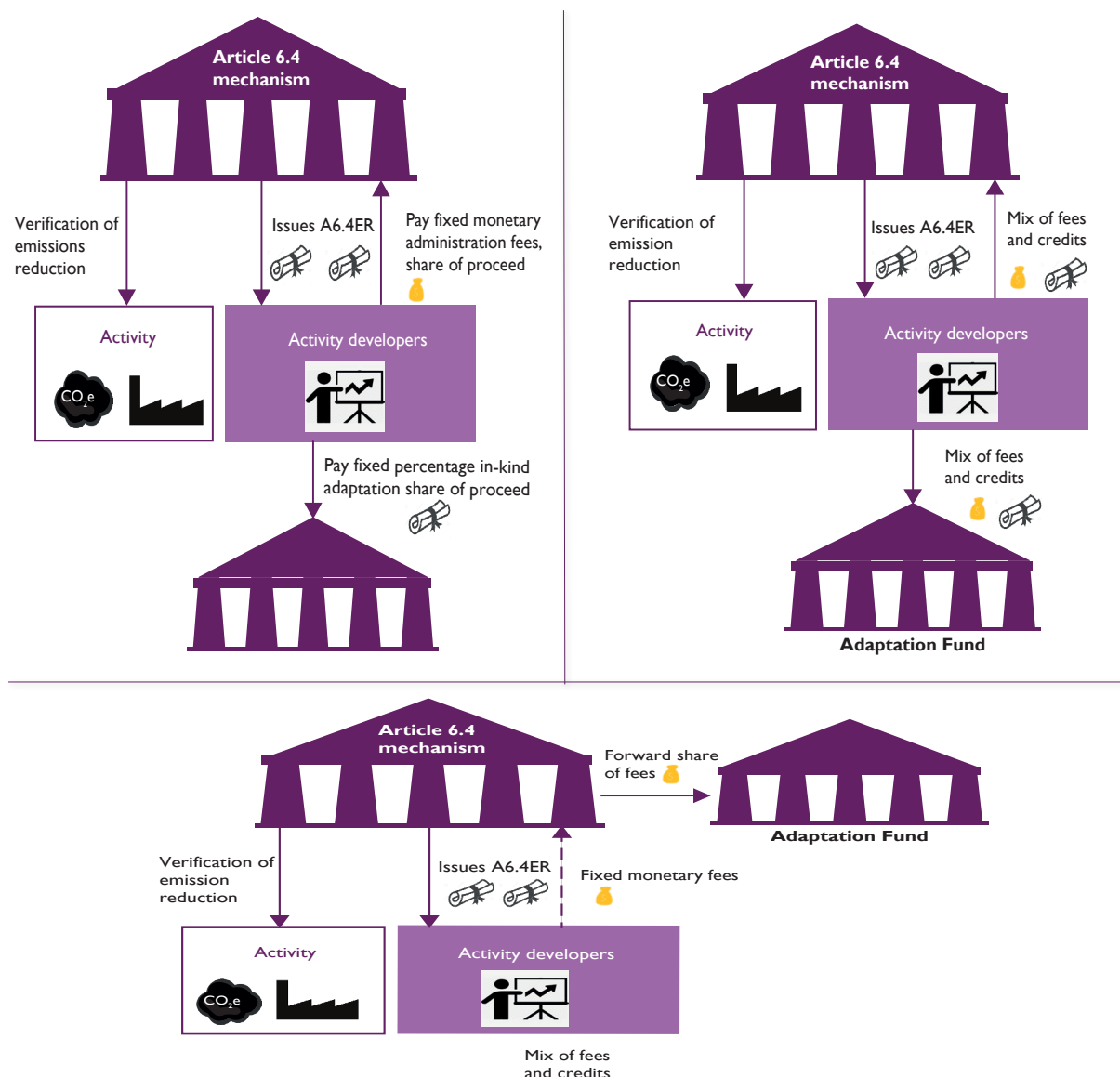
Figure 18: Potential points of levying SOP under Article 6.2



Even if under Article 6.4 the applicability of SOP is not in question, the exact modalities are still being discussed. There are different options how to levy the SOP (see **Figure 19**):

- Project developers could pay a monetary fee at registration and/or issuance. The advantage is that monetary fees provide for a stable income, even in times of low market prices.
- A fixed percentage of units issued could be withheld at issuance and transferred to a separate account. The units can then be sold on the international market.
- A hybrid mix of monetary fees and a share of the mitigation outcomes could be levied. Income from fees and from the sale of mitigation outcomes would then be distributed among the administrative institutions and the Adaptation Fund.

Figure 19: Options to operationalise share of proceeds for the Article 6.4 mechanism



C.2.5 Coverage of avoided emissions (forestry and REDD+)

GHG emissions can be avoided through the reduction of deforestation. Since 2007, this has been operationalised under REDD+ which is covered by Article 5 of the Paris Agreement. However, the eligibility of REDD+ activities under Article 6, and in particular under Article 6.4, is contentious. Under the CDM, reforestation and afforestation were eligible, but not the prevention of deforestation. The latter was left out due to the fear that host countries and project developers would not be able to accurately measure emission reductions and removals, with a potential bias for overestimating these. Forestry projects often cover very large areas that are difficult to monitor. The EU's Emission Trading System excluded any type of credits from forestry projects, due to concerns regarding their permanence and monitoring of emission reductions. Trees could be cut or burned, and emissions occur after their reduction has been credited. Experience has shown that proving the environmental integrity of REDD+ activities is challenging.

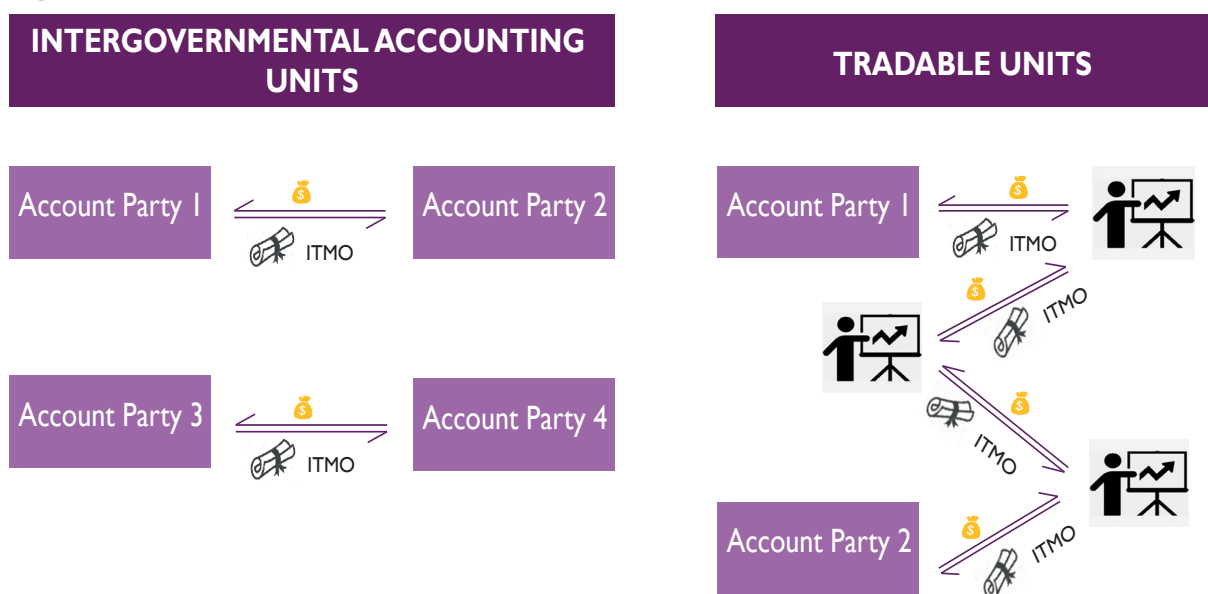
On the other hand, preserving and enhancing forests offers a huge mitigation potential, in particular in countries that have a very small carbon footprint with limited emissions from industry or transport sectors. Therefore, some Parties push for the general eligibility of REDD+ activities, as they want to diversify the opportunities to finance the enhancement of carbon sinks. They argue that the Paris Agreement explicitly targets both emissions and removals by sinks. Furthermore, they do not see an explicit exclusion of REDD+ activities in Article 6, solely because they are referred to in Article 5. Some also stress that if REDD+ is not excluded under Article 6.2, a level playing field should be established through eligibility under Article 6.4.

C.3 Contentious issues regarding “cooperative approaches” under Article 6.2

C.3.1 The definition of ITMOs as accounting or trading units

Parties disagree whether or not ITMOs will be a tradable commodity promoting the emergence of an international carbon market.

Figure 20: The nature of ITMOs



Some Parties see ITMOs as purely intergovernmental accounting units or amounts that are moved between national accounts but cannot exist outside of these accounts. This means no other stakeholders can acquire, hold, and sell ITMOs. Preventing trading is justified by a fear of speculation and significant fluctuations in prices that may impact Parties at the end of the NDC periods when the demand is expected to be highest. This would however impede a direct engagement of the private sector in Article 6.2. If A6.4ERs are issued in the account of Article 6.4 activity developers, including private stakeholders, a separate system will be required to enable international A6.4ER transactions.

Other Parties understand an ITMO to be a tradable unit, with a unique identification code that can be traded between and outside of national accounts. An emerging international market for ITMOs would ensure a supply and demand-oriented price discovery, whereas intergovernmental transactions are often characterised by politically determined prices. Furthermore, the greater the number of actors in the market, the lower the risk that some actors might dominate the market and distort it. It would also allow the use of ITMOs for voluntary

action by non-Party stakeholders or in the context of non-UNFCCC mitigation schemes, such as CORSIA. If ITMOs are tradable, A6.4ERs could be one particular type of ITMOs.

C.3.2 Characteristics of ITMOs – broad or narrow definition of “real, verified, additional, and permanent”?

While there seems to be some acceptance that ITMOs can be expressed in CO₂e and other metrics determined by participating Parties (allowing ITMOs to be, for instance, Renewable Energy Certificates), operationalising that ITMOs are “real, verified, additional, and permanent” still is controversial. These characteristics can be interpreted broadly or narrowly.

“Real and verified” could be interpreted broadly as a requirement to ensure independent verification of the underlying emission reductions achieved in cooperative approaches. Narrowly, it can be interpreted as a requirement to verify the ITMO transfer and the respect of the guidance as such.

The principle of being “additional” could be interpreted broadly as requiring a test whether the activity is additional to BAU, taking into account the ambition of the NDC. Interpreted narrowly, it could be seen as automatically fulfilled through the corresponding adjustments made after the transaction.

Including the requirement of permanence could be broadly interpreted as an exclusion criterion for pursuing forestry and land-use activities under Article 6, for instance in the context of REDD+ (see also Section B.4.1). These project activities often cannot guarantee permanence of the emission reductions – for instance, trees planted or preserved from deforestation might be cut at a later point in time. A narrow interpretation would mean that there are certain safeguards against reversal, such as a buffer of emission credits to cover events of forest destruction, or a temporary nature of credits (as under the CDM).

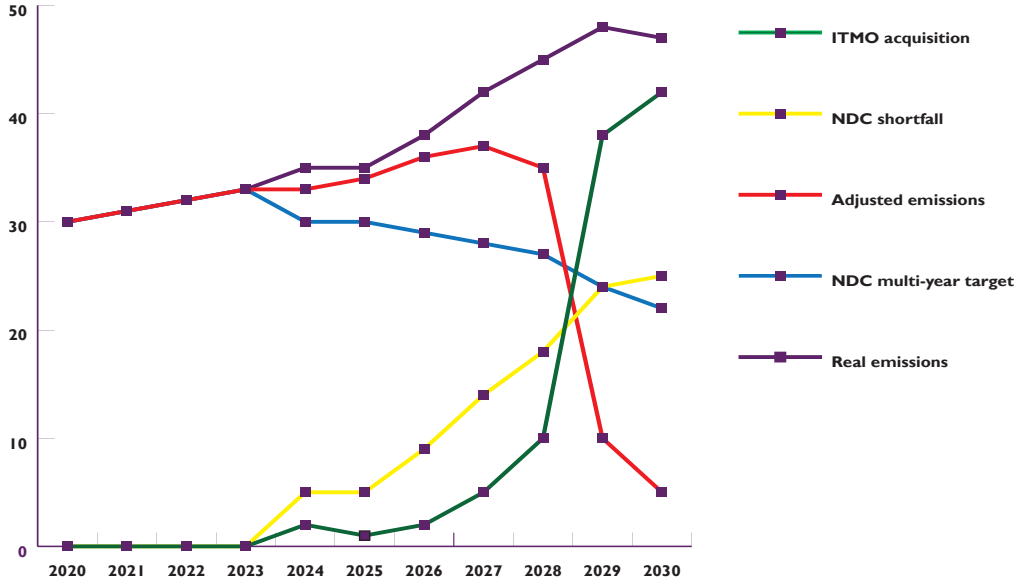
C.3.3 Accounting for multi- vs single-year NDC targets

The timing for NDC targets can be formulated in a very different manner. Here are two examples:

- A country can pledge that in 2030 it will reduce its emissions by 20% compared to BAU scenario without an NDC. This would be a single year target. For compliance with the target, only the emissions level in 2030 is relevant, not the actual development of accumulated emissions during the NDC implementation period.
- Otherwise, a country can pledge to reduce its emissions by 20% in the 2020-2030 period compared to a BAU scenario and commit to a multi-year mitigation trajectory in its multi-year target. In **Figure 21**, a country has growing shortfall to its NDC target and thus has to acquire sufficient ITMOs to cover the sum of the shortfall over the full NDC period.

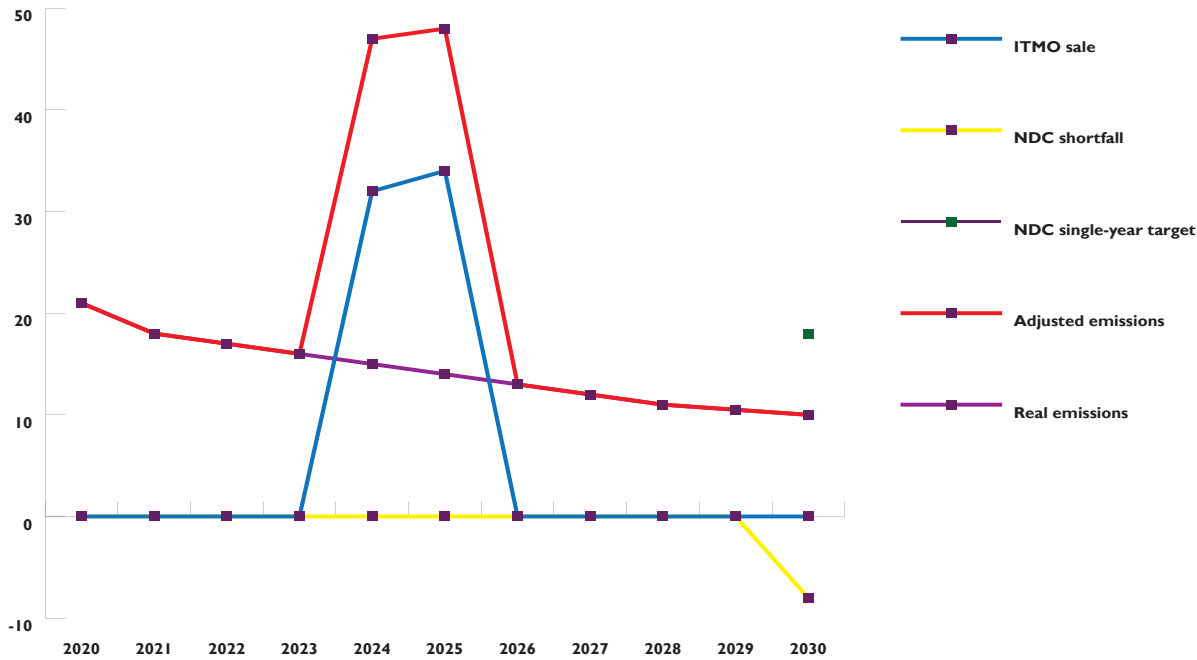
When NDCs have different timeframes and targets, accounting for the transfer of mitigation outcomes against different forms of targets is technically very challenging. Some Parties therefore argue that in order to participate in market-based cooperation, all participating Parties would have to formulate a clear basis for accounting that is harmonised internationally. Other Parties reject any form of interfering in the national choices of formulating NDCs. Here, a political decision must be made. In the case of opting to allow for the trading between different forms of NDCs, Parties must introduce technical safeguards to ensure environmental integrity. The easiest option is accounting for an NDC whose targets are formulated on the basis of a multi-year emissions trajectory.

Figure 21: Corresponding adjustments to a multi-year trajectory (acquiring Party perspective)



Accounting for ITMOs toward single-year targets will require a specific approach to avoid the perverse incentive to transfer out ITMOs previous to the target year without having to reduce emissions elsewhere (see **Figure 22**, where the country reaches its single year NDC target in 2030 regardless of the volume of ITMOs it sells in the years before 2030). Here, the situation would essentially be similar to CDM, where the transferring country does not have a target.

Figure 22: Risks in accounting in the context of single-year NDC targets (transferring Party perspective)



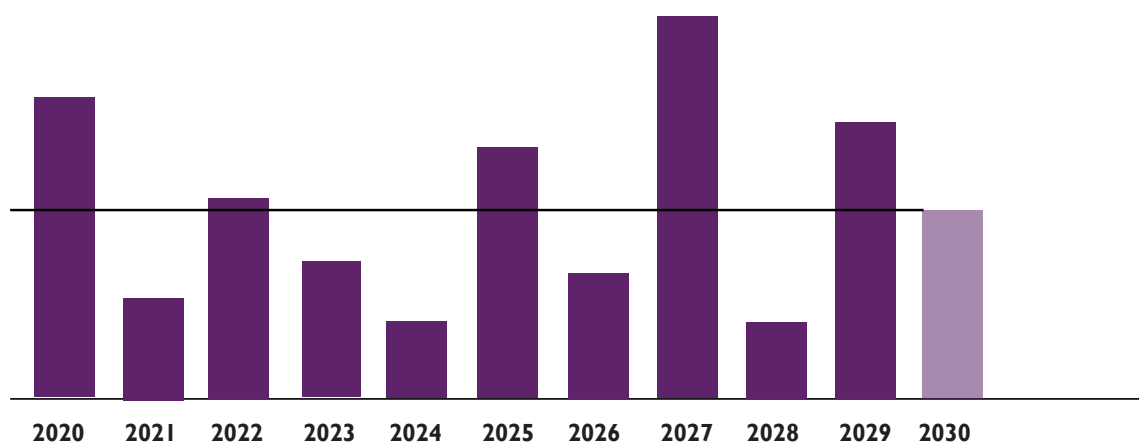
Parties proposed four broad options how accounting can be safeguarded in the context of different targets:

- **Harmonisation approach:** All Parties are required to have continuous, multi-year targets.
- **Vintage approach:** If Parties have single-year targets, transfers can only occur between Parties that have the same target year and corresponding adjustments must be undertaken in the target year.
- **Representativeness approach:** While Parties may have different target years and target timeframes, accounting for ITMOs must be made representative for the ITMO generation and use over time, for instance through averaging ITMO volumes achieved through an NDC period.
- **Trajectory approach:** All Parties, regardless of their NDC, must establish a multi-year emissions trajectory that is in line with their NDC. Corresponding adjustments are then undertaken against this trajectory.

The different options to address the challenge of single-year targets differ significantly regarding the total sum of ITMOs needed, creating tension between buyers (who want to buy less) and sellers (who want to sell more).

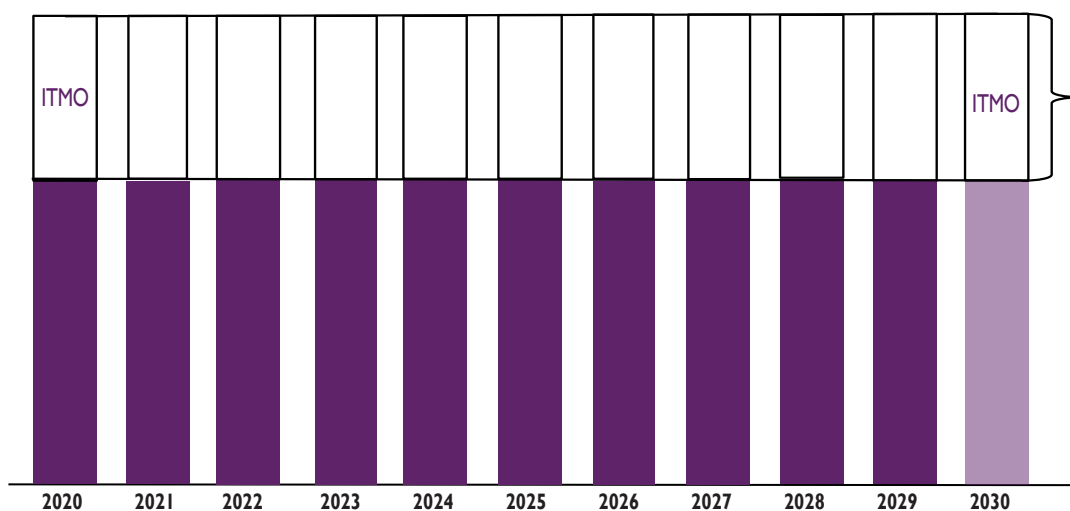
While options 1 and 2 are rather straightforward, but also more restrictive, options 3 and 4 merit a closer look. Averaging would convert ITMOs transferred in a certain time period into a representative ITMO volume for the single year target. In **Figure 23**, the average of the blue bars showing annual ITMO volumes gives the shaded ITMO volume that can be used against the single year target. In this case, one would need 10 ITMOs of vintages 2020-2030 to offset 1 tCO₂e in the single target year of 2030.

Figure 23: Averaging ITMOs over the NDC period



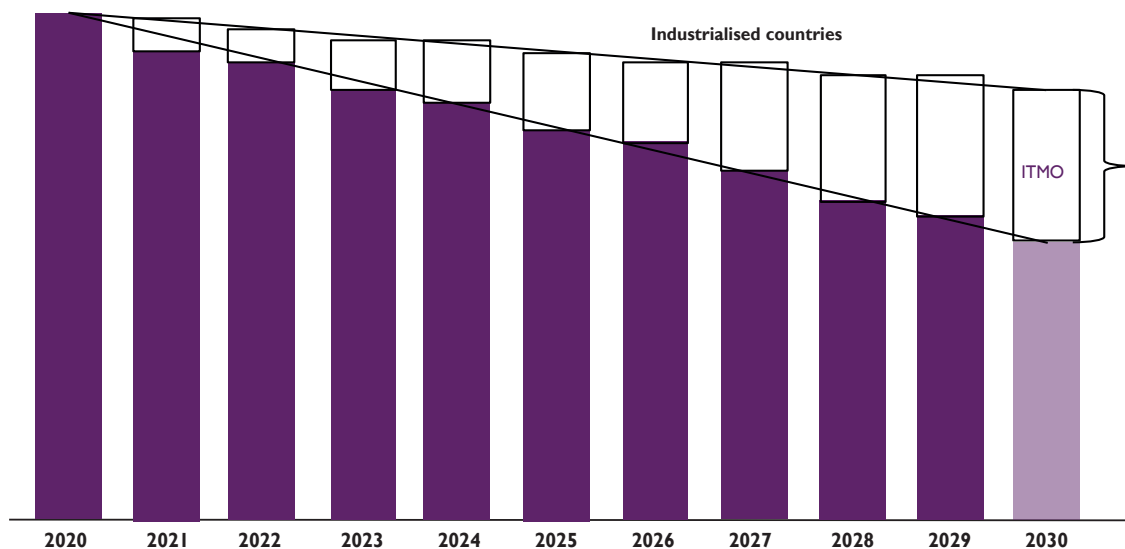
However, countries might actually prefer to establish trajectories, as averaging only makes sense if one assumes that already in the start year of the NDC period the same amount of ITMOs as the one in the single target year would have been used, as shown in **Figure 24**. Here, the purple bars denote domestic emissions covered by the NDC, whereas the white bars show the ITMO volumes.

Figure 24: Applying average ITMO transactions to NDCs



Assuming a linear emissions trajectory would be a conservative approach to operationalise the fourth accounting option. Here, one would assume a continuously increasing volume of ITMOs throughout the NDC period until the single target year is reached (see **Figure 25**).

Figure 25: Assuming a linear multi-year emission reductions path



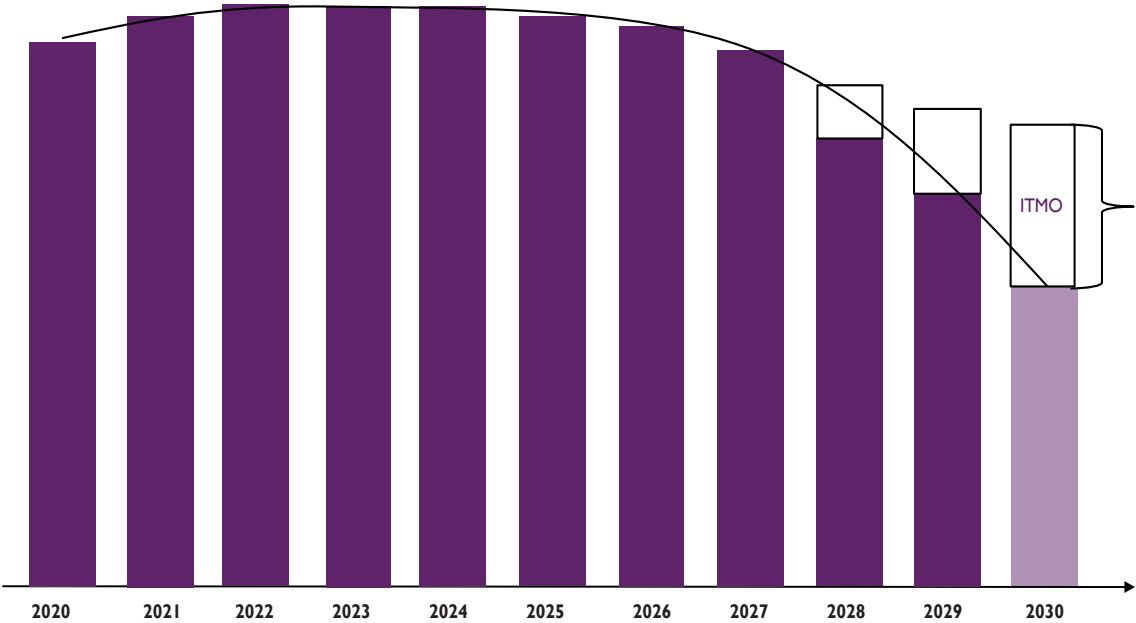
The general formula for the ITMO volume required in each of the years (with n being the single target year) would be a sequence starting with $1/n$ for year 1 up to $n-1/n$ for the year $n-1$, which gives a total volume of 4.5 times the single target year ITMO volume for a 10-year NDC period, and 2 times for a 5-year NDC period.

If a Party now wants to offset emissions in the target year, offsetting 1 tCO₂e would thus require 5.5 ITMOs with vintages 2020-2030 ($1t + 1t*4.5$ to reflect emissions in previous years) for a 10-year NDC period and 3 ITMOs ($1t + 1t*2$) with vintages 2025-2030 for a five-year NDC period.

If a Party offsets emissions after the target year over the whole NDC implementation period, it will need to provide 5.5 times the ITMOs required to achieve the target in the single year for a 10-year NDC period (1/n for year 1 up to n-1 for the year n-1 plus 1 for the target year), and 3 times for a 5-year NDC period.

Another operationalisation of a multi-year emissions trajectory would be to assume that most mitigation would only occur in the later years of NDC periods. Here, ITMOs would only be required for the last years (see **Figure 26**). A general formula applicable to all NDCs simultaneously cannot be developed, as these trajectories would look very different from country to country. A rough estimate would be to require two ITMOs of vintages 2020-2030 to offset 1 tCO₂e in the single target year of 2030.

Figure 26: Assuming a rising and then falling emissions path



C.3.4 Corresponding adjustments for ITMOs expressed in different metrics

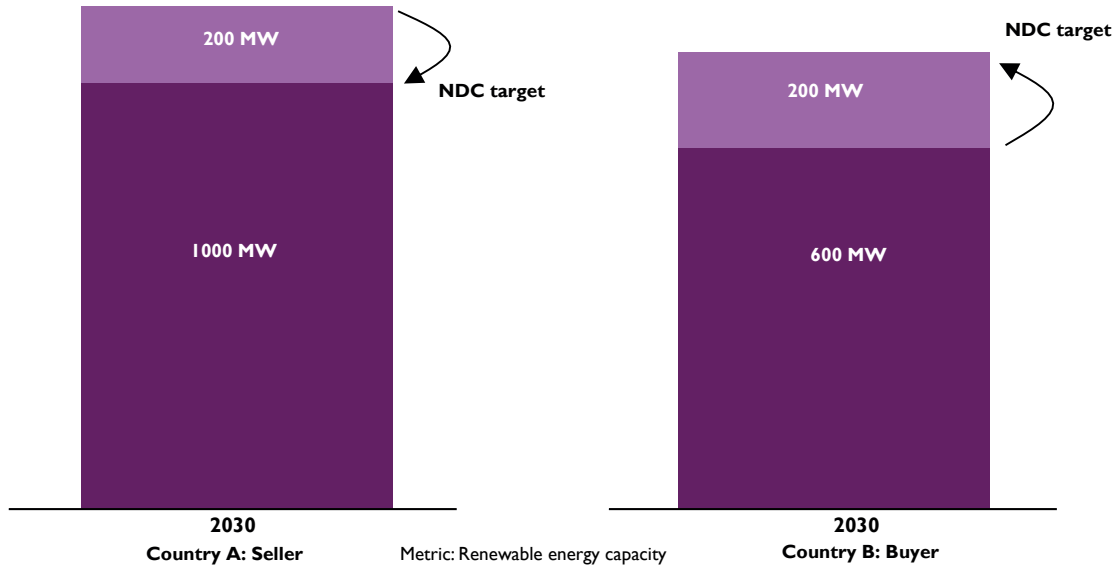
When ITMOs are expressed in CO₂e, they can be easily accounted for against the emission levels in the national inventory reports, as these are also expressed in CO₂e. Furthermore, inventory reports are elaborated based on common IPCC methodologies that are fairly comparable.

Several Parties insist that international cooperation should not be restricted to mitigation outcomes expressed in CO₂e, in particular if NDCs contain targets in other metrics. They perceive the requirement to convert mitigation outcomes in CO₂e before transfer to be an infringement to the bottom-up nature of NDC formulation.

How can technical modalities to operationalise accounting for other metrics look like? Here, no equivalent to national inventory reports exists. The current text proposes a “balance” of ITMO acquisitions and transfers that can be applied to the NDC. It is however unclear which indicator is applied for the “balance”, and if this also requires NDCs to have a target expressed in the same metric as the ITMO.

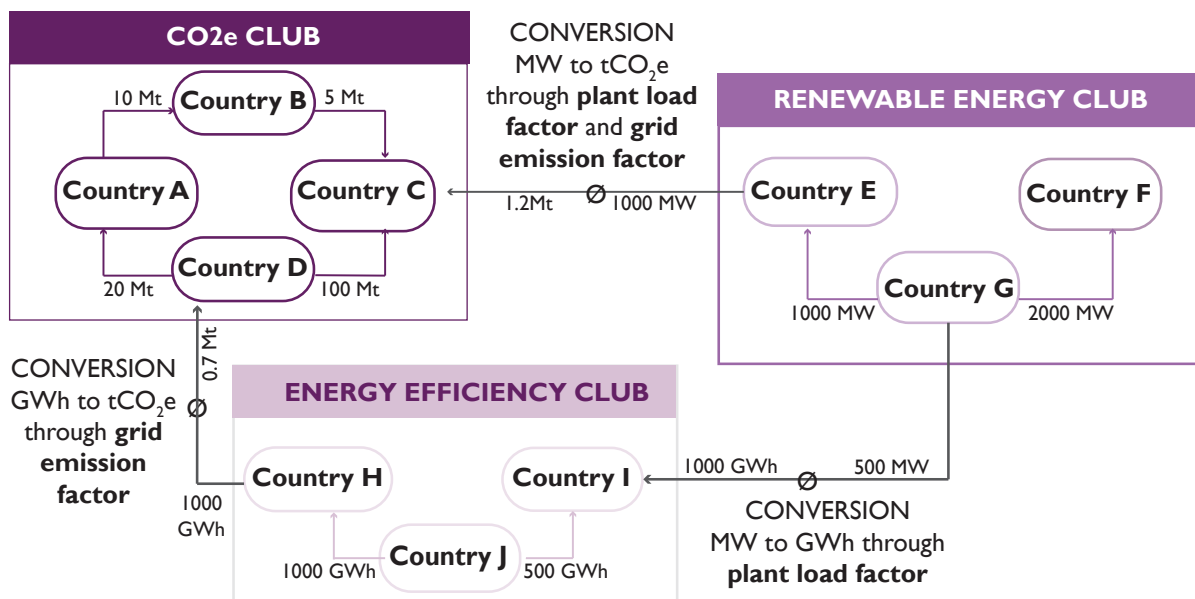
If two Parties engage in a cooperative approach with renewable energy capacity ITMOs denominated in MW, accounting will be feasible according to the approach shown in **Figure 27**.

Figure 27: Applying renewable electricity capacity denominated ITMO transfers to NDC targets



But how can ITMOs be transferred between countries that have targets expressed in different metrics? This will require a conversion of ITMOs. A possible approach for such conversion is shown in **Figure 28**, where three different metrics – CO₂e, capacity of renewable electricity, and energy savings – are applied.

Figure 28: Landscape of different “trading clubs” according to metrics chosen, and “safety valves”



However, there will be some distortionary effects and differences in the amounts of ITMOs traded dependant on which country ultimately trades “out of the club”. For example, Country G has a high grid emission factor and transfers ITMOs in MW to Country E, which has a significantly lower grid emissions factor. If now Country E transfers to country C, the amount of ITMOs transferred is lower than the equivalent mitigation mobilised in the host country G, as country E has a lower emissions factor. However, this can also work the other way around and any conversion of secondary trading can also lead to an inflation of ITMOs traded. The only safeguard possible in this case are conservative conversion factors, best determined under international oversight.

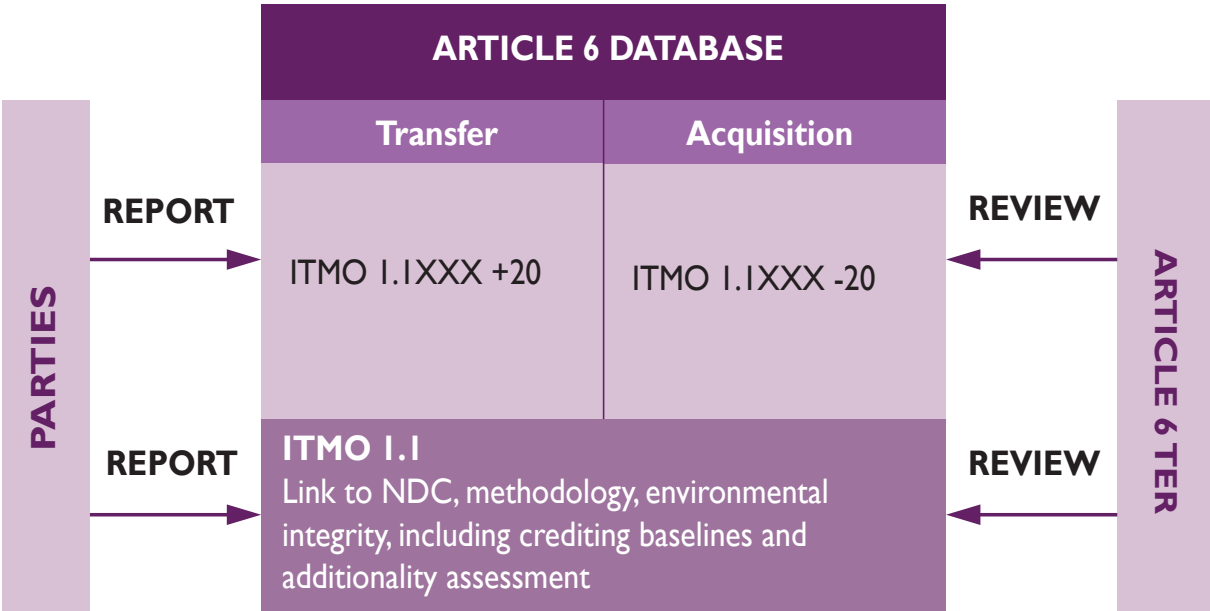
C.3.5 International oversight on the reporting of cooperative approaches

As explained above, the cornerstone of the Article 6.2 guidance is the reporting and review process. However, the details are still open. First, a central question is the mandate of the A6TER which can be interpreted broadly or narrowly. The A6TER could be mandated to check only procedural aspects of recording and communicating corresponding adjustments, or to examine the environmental integrity and robustness of the underlying methodologies and activities. The same applies to the mandate of the Secretariat when performing consistency checks in the Article 6 database. The mandate also depends on the operationalisation of the Article 6 database and whether it will allow for the international tracking of ITMOs across national and other accounts or not.

Apart from the mandate, the role and functions of the Article 6 database are also undetermined as of yet. The following questions arise:

- Will the database simply record corresponding adjustments or also qualitative information?
- Will the database track information on international transfers in real time or on an annual or (bi)annual basis?
- Will the database only record ITMO transfers or also the issuances and transactions under the Article 6.4 mechanism?

Figure 29: Article 6 database and mandate of the A6TER



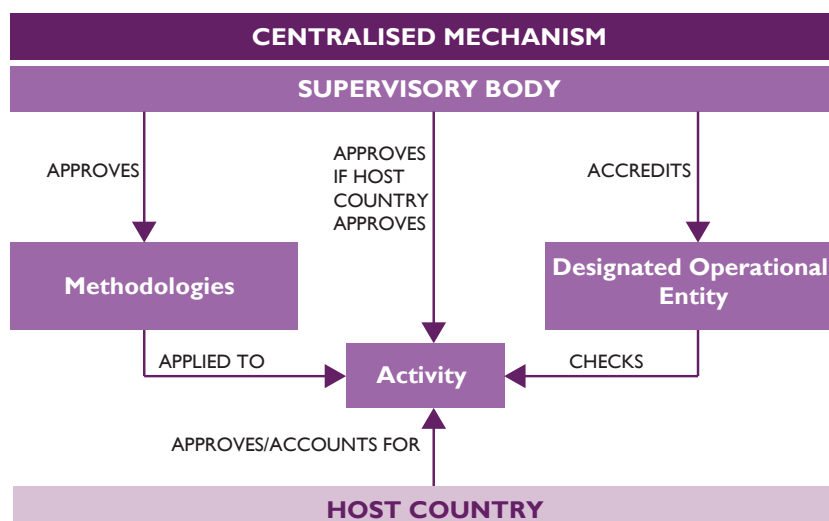
C.4 Contentious issues regarding the Article 6.4 mechanism

C.4.1 Host Parties' roles and responsibilities in governance

It is undisputed that it will be the host countries' right and responsibility to approve the activities that are registered under the Article 6.4 mechanism and to communicate to the Supervisory Body how the activity relates to the NDC, and contributes to sustainable development in the country. Furthermore, a suggestion to require, apart from the approval of the activity, a separate authorisation that A6.4ERs are transferable internationally, was received positively by Parties.

Still under debate is a more far-reaching proposal to expand host countries' responsibilities instead of the establishment of a centralised mechanism, following the example of the CDM. Under a centralised mechanism, the host country would have limited responsibilities beyond the approval and/or authorisation process described above. Governance would be secured through the Supervisory Body that accredits DOEs, approves methodologies and activities and issues the credits into the respective account in the mechanism's registry.

Figure 30: Centralised governance of the Article 6.4 mechanism



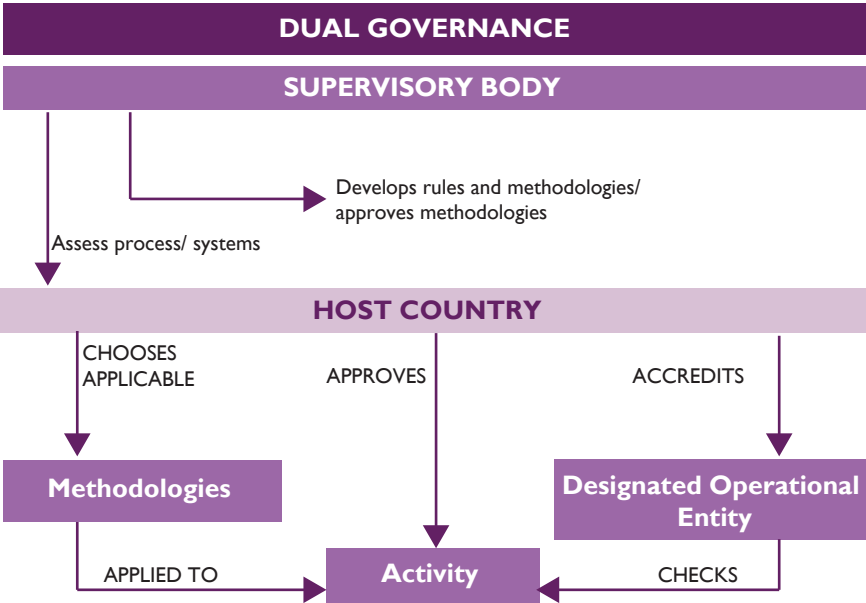
Under a dual governance system, the host country would have more extensive rights and also responsibilities. While international standards will be set by the Supervisory Body which would also oversee the host country processes, the host country would determine:

- What activities can be pursued under the Article 6.4 mechanism after having clarified the link of these activities to the NDCs
- Which baseline setting approaches are applicable to the activities pursued in the host country and what methodologies shall be used
- What would be further criteria (e.g. sustainable development) any activity would have to fulfil
- Moreover, host countries could establish their own accreditation systems for DOEs

Parties favouring the dual governance system say it would ensure greater host country ownership allowing them to build governance experience, and ensure host countries do not “oversell” their emission reductions

and safeguard the achievement of their NDC. Parties opposing this approach fear that this model would impose a heavy burden on host country institutions and also weaken the authority of the CMA over the mechanism as well as the quality and comparability of mitigation outcomes achieved through the Article 6.4 mechanism. On the spectrum between a centralised mechanism and a dual system, different compromises and nuances in rule setting are possible.

Figure 3 I: Dual governance of the Article 6.4 mechanism



C.4.2 Setting baselines and determining additionality

As mentioned above, the Supervisory Body (and/or the host country) will approve methodologies regarding the setting of baselines and the determination of additionality for the activity types eligible under the mechanism.

The stringency of baselines and of additionality testing is the key element to ensure the environmental integrity of the activities.

BOX 2: Baselines

A baseline is a scenario that represents anthropogenic GHG emissions that would have most likely occurred in the absence of a mitigation activity. The term “baseline” may be easily confused as it is referred to in different contexts.

Many actors think additionality can be determined through a baseline. However, credibly assessing the additionality of an activity requires a separate additionality test (see **Box I**). In the context of market mechanisms, crediting baselines are used to determine the amount of emission reductions or removals, with credit volumes calculated as the difference between the measured emission reductions and the calculated baselines.

Baselines can be set at the micro-level for a specific project, providing the basis for estimating the effect of a singular intervention. Crediting at a sectoral or policy level will require baselines that are set at the macro-level and estimate aggregate effects.

NDC targets and objectives are also often set against one or several baselines, set at the national or sectoral levels. We refer to them as “NDC baselines”.

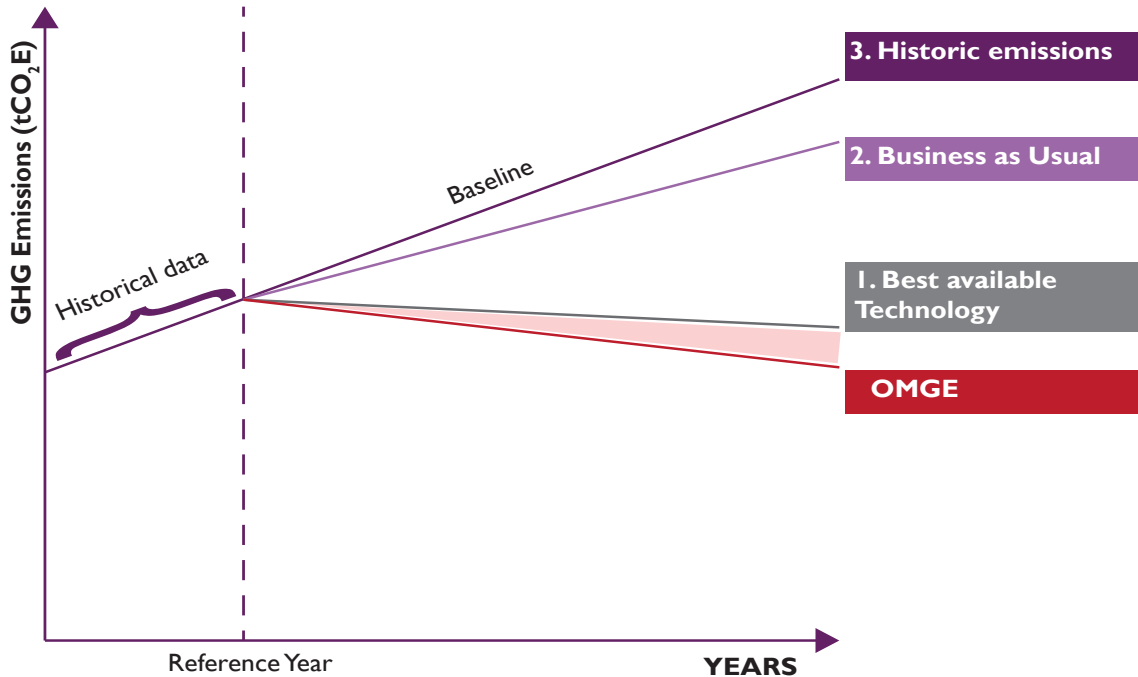
If the NDC of the transferring country is not ambitious (and thus generates “hot air”), crediting of non-additional activities leads to a violation of the principle of environmental integrity. If such “hot air” is traded, i.e. transferred to other countries, or claimed against NDC targets by the host Party, i.e. through cancellation, then total global emissions increase as a result, undermining environmental integrity. When the crediting baseline overestimates the emission levels, then fictitious emission reductions will be credited and environmental integrity is jeopardised. A key question is thus whether if the Supervisory Board will assess additionality only against the NDC or through investment tests.

The calculation of baselines on all levels of aggregation relies heavily on data availability. Therefore, while being key to safeguard the mechanism, complex baselines constitute barriers to participation of low-income countries unless the Supervisory Body and its support structure undertake (part of) the work.

In the context of crediting baselines, three broad approaches are being discussed:

1. The baseline scenario should reflect the application of the best available technology. There are some variations of this general approach of determining the “availability” of technology to also reflect on the economic or environmental costs of the technologies or to consider regional differences. However, this is in general a stringent approach and for many project types would already set a baseline of decreasing emissions.
2. The baseline would represent a BAU scenario.
3. The baseline represents the emission levels of the past of these activities (historic emissions).

Figure 32: Different approaches to calculate baselines



Some Parties argue that different rules should apply for countries with different economic capacities. While economically stronger countries should apply a “performance benchmark” that reflects best available technologies, developing countries with lower capacities should also be allowed to credit against BAU baselines (mostly representing an increase in emissions) or historic emission levels. Other Parties stress that the Article

6.4 mechanism should apply more stringent methodologies than the Kyoto mechanisms, which mostly applied BAU scenarios and historic emissions.

Costs associated with baseline setting can be reduced through “standardised baselines” that can be applied for one project type in different contexts. However, it is very difficult to strike the right balance between conservativeness, accuracy, and standardisation. Activity developers have only limited interest in developing standardised baselines, as their calculation is very complex and requires a lot of data. One proposal is to task the Supervisory Body with their development.

C.4.3 Transitioning from the Kyoto mechanisms CDM and JI

The Kyoto mechanisms CDM and JI are the predecessors of the Article 6 mechanisms for market-based cooperation. Under these mechanisms, methodologies and standards were developed, projects registered, and credits are being issued. In particular, the CDM experienced a “gold rush period” as the private sector was mobilised at scale and developed an unexpectedly high number of projects with significant mitigation potential. However, demand for CERs faltered after both mechanisms were severely criticised by representatives from media, academia, and governments due to concerns regarding environmental integrity. In Joint Implementation, this was in particular due to the crediting of “hot air” in countries in transition, while under CDM perverse effects regarding the production of industrial gases, and alleged under-performance regarding additionality, contribution to sustainable development and – in few cases – human rights were raised. Both mechanisms, in particular the CDM, underwent lengthy reform processes to tackle these issues. The CDM has a large pipeline of projects and programmes of activities until today, many of which are dormant due to the low CER price. The accumulated CER supply is estimated by many to reach several billion tCO₂e.

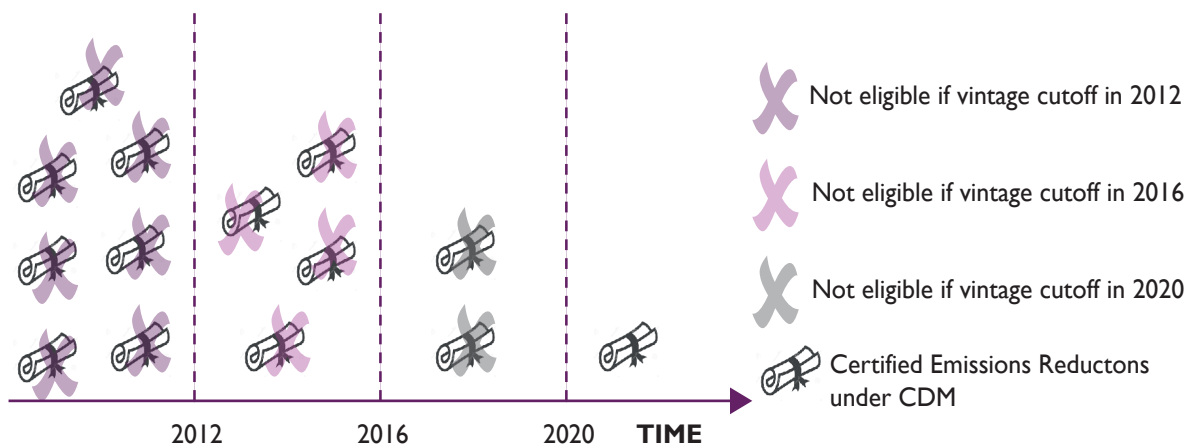
The transition of the credits/units, activities, and standards and methodologies of CDM and Joint Implementation to their successor, the Article 6.4 mechanism, is one of the most contentious issues of negotiations. One prominent argument in favour of the CDM transition is the need to preserve existing mitigation investments and their mitigation contribution. The CDM successfully contributed to the creation of a functioning carbon market: it attracted private investors at scale and catalysed resources in a broad number of sectors and countries. Overall, the transition of the CDM would be a trust enhancing measure sending a signal to the private sector that a market mechanism would not just be “switched off”. Ensuring the transition of CDM activities would generate new investments in mitigation through the programmatic CDM framework, given the limited transaction costs associated with the inclusion of a new project into a programme, which is significantly simplified, and less resource-consuming compared to the registration of a brand-new activity. As many investors are already familiar with the methodologies applied under the CDM, utilising these would limit the associated transaction costs resulting from completely new methodological requirements. This would prevent the need for large scale capacity building exercises as well as reduce unnecessary outlays for consultancies.

Parties opposing the CDM transition point at the huge overhang of CDM credits that – unless governments would ramp up demand significantly – will result in an oversupply which will keep prices low potentially for years and will very likely prevent new investments in mitigation actions. They also point at the low credibility of many credits from existing CDM activities regarding lack of additionality or negative social and environmental impacts, such as large hydropower plants, industrial gases (HFC-23 and N₂O from adipic acid production), or large coal-based power projects. Some Parties fear that Kyoto mechanism transition could also be interpreted as a justification for industrialised countries to transfer Kyoto surplus allowances into the NDC implementation period.

The negotiation options in the current negotiation texts are linked to four fundamental scenarios, listed in **Table 2**.

Table 2: Negotiation options on transition of Kyoto mechanisms				
Transition Scenario	Transition of Activities	Transition of Units	Transition of Baselines and Methodologies	Transition of CDM Accreditation Standards and Procedures
Full transition	Registration of CDM and/or Joint Implementation activities without further criteria	Units can be used by a Party towards NDC Automatic transfer of CDM units to the Article 6.4 mechanism registry Issuance of A6.4ERs for activities registered under CDM and/or Joint Implementation	Validity of CDM and/or Joint Implementation baseline and monitoring methodologies for Article 6.4 activities	Accreditation standards and procedures serve as basis for the standards and procedures for accreditation under the Article 6.4 mechanism
Transition under certain circumstances	Registration of activities under Article 6.4 in an expedited registration process (not having to undergo full examination) Exclusion of certain activity types Chronological cut-off dates for activities, based on registration or start dates	Vintage-related cut-offs	Exclusion of certain methodology types Interim transition of methodologies with a schedule for review Enhancement of existing methodologies as condition for transition	Expedited or grandfathered accreditation for Designated Operational Entities
No transition	Activities not allowed to be registered under Article 6.4	Units not to be used by a Party towards its NDC No transfer of CERs in Article 6.4 mechanism registry No issuance of A6.4ERs for activities registered under the CDM and/or Joint Implementation		

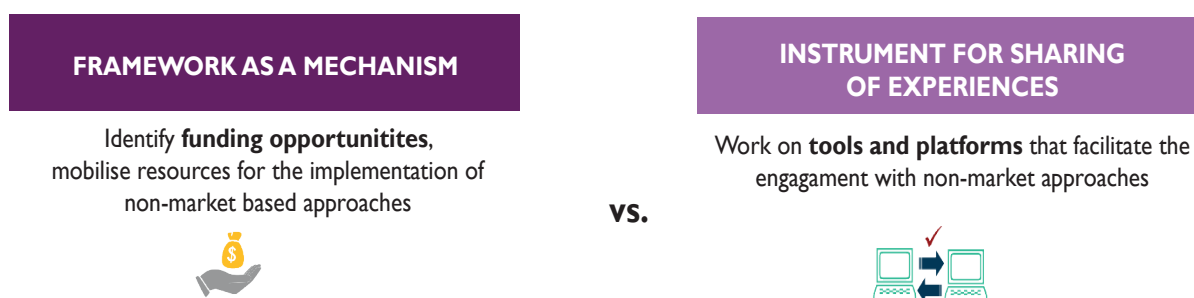
Figure 33: Vintage restriction for CER transition



D. CONTENTIOUS ISSUES UNDER THE ARTICLE 6.8 WORK PROGRAMME

The ultimate purpose of the framework and the implications this has on the work programme is contested. Some Parties see the framework as a mechanism in itself, destined to mobilise resources for the implementation of NMAs. Other Parties consider it as an instrument for the sharing of experiences and information, so that Parties can identify synergies and opportunities in the implementation of NMAs. Following the first interpretation, the work programme would aim to identify funding opportunities for NMAs and match these with expressed needs by Parties. Following the second interpretation, the work programme would work on tools and platforms that facilitate the engagement with NMAs.

Figure 34: General interpretation of the framework under Article 6.8



Parties that support the vision of a “mechanism” for NMAs also support the establishment of a dedicated body for the centralised implementation of the work programme. Parties that support the idea of an experience-sharing instrument tend to favour a more decentralised and weaker institutionalisation, for instance a contact group or forum chaired by SBSTA.

The calls for a balanced outcome on the negotiations for market- and non-market based forms of cooperation also lead to a situation where compromise might be found in concessions between the different issues of negotiations concerning Article 6.2, 6.4 and 6.8.

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LIST OF ABBREVIATIONS

A6.4ER	Article 6.4 Emission Reduction
A6TER	Article 6 Technical Expert Review
BAU	Business as usual
BTR	Biennial Transparency Report
CER	Certified Emission Reduction
CDM	Clean Development Mechanism
CMA	COP serving as Meeting of the Parties to the Paris Agreement
COP	Conference of the Parties
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
DOE	Designated Operational Entities
ETF	Enhanced Transparency Framework
ETS	Emission Trading System
GHG	Greenhouse gas
ITMO	Internationally transferred mitigation outcome
LDC	Least Developed Country
NIR	National Inventory Report
NDC	Nationally Determined Contribution
NMA	Non-market approach
OMGE	Overall mitigation in global emissions
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SB	Meeting of the subsidiary bodies of the UNFCCC
SBSTA	Subsidiary Body for Scientific and Technological Advice
SIDS	Small Island Developing States
SOP	Share of Proceeds
TER	Technical Expert Review
UNFCCC	United Nations Framework Convention on Climate Change