

MIT Center for Energy and Environmental Policy Research

Working Paper Series

Advancing International Cooperation under the Paris Agreement: Issues and Options for Article 6

MICHAFI A. MFHLING



NOVEMBER 2021 CEEPR WP 2021-016



Advancing International Cooperation under the Paris Agreement: Issues and Options for Article 6

Michael A. Mehling*

Table of Contents

Tabl	le of Contents	1
1.	Background	2
2.	Critical Issues under Negotiation	3
2.	1 Accounting for Emission Reductions Outside NDCs	5
2.	2 Share of Proceeds	7
2.	3 Transition of Legacy Units	9
2.	4 Overall Mitigation in Global Emissions	11
2.	5 Baselines and Additionality	12
3.	Implications for a Potential Compromise	13
4.	Implications of a Failure to Reach Compromise	15
5.	Outlook	17
Bibli	iography	18
Ann	ex 1: Relevant Excerpts of Article 6 of the Paris Agreement and Decision 1/CP.21	22
Α	rticle 6 of the Paris Agreement	22
D	ecision 1/CP.21 (paras. 36-38)	23
Ann	ex 2: Positions of Parties on Critical Issues under Negotiation	24
End	notes	39

^{*} Deputy Director, Center for Energy and Environmental Policy Research, Massachusetts Institute of Technology, Cambridge, MA, USA; Professor, School of Law, University of Strathclyde, Glasgow, UK. Contact: mmehling@mit.edu. I gratefully acknowledge valuable comments on an earlier draft received from Aglaja Espelage, Andrei Marcu, Axel Michaelowa, Giuseppe Montesano, Nicolò Sartori, and Robert Stowe; as well as support from the Enel Foundation and the Harvard Project on Climate Agreements. Opinions and remaining errors are my own.

1. Background

Article 6 of the Paris Agreement enables Parties to engage in voluntary cooperation as they implement their nationally determined contributions (NDCs). Specifically, Article 6 sets out three pathways for voluntary cooperation:

- cooperative approaches through the use of internationally transferred mitigation outcomes (ITMOs) in Article 6.2;
- a new crediting mechanism, sometimes referred to as the 'Sustainable Development Mechanism', in Article 6.4; and
- a framework for non-market approaches in Article 6.8.¹

Although Article 6 omits explicit reference to carbon markets, it 'firmly anchors market mechanisms in the Paris Agreement'² with the two options set out in Article 6.2 and 6.4, and thereby leverages the promise of such mechanisms to lower the cost of achieving agreed climate policy outcomes. A recent study suggests that the compliance flexibility introduced by Article 6 can reduce the overall costs of mitigation under currently submitted NDCs by approximately US\$ 300 billion per year in 2030,³ echoing earlier estimates of savings of similar magnitude.⁴ Such cost reductions, in turn, can increase the latitude of countries to scale up global climate ambition by unlocking additional resources that can be diverted to mitigation activities.⁵ Calculations of the additional mitigation achievable by reinvesting avoided cost are, again, staggering, and would roughly allow doubling already pledged emission reductions annually through 2030.⁶

Given the substantial shortfall between currently pledged NDCs and the ambition required to achieve the temperature stabilization targets of the Paris Agreement, international cooperation under Article 6 has been described as a necessary 'tool to promote more mitigation action ... and pave the way for progress within the next NDC cycle.' Critics have countered that Article 6 could weaken ambition under the Paris Agreement if it lacks sufficient integrity or creates a distorted incentive for future NDCs. With a recent synthesis report of NDCs confirming that a majority of Parties intends to use Article 6 as a source of climate finance or as a means to achieve pledged emission reductions, the stakes for Article 6 are high.

Importantly, however, the treaty provision that constitutes Article 6 in the Paris Agreement is sparsely worded and replete with vague concepts. Such 'constructive ambiguity' – often a deliberate choice to accommodate conflicting viewpoints – can compromise implementation of Article 6 by leaving room for divergent interpretations of key operational elements and creating uncertainty. Parties have therefore been engaged in developing rules and guidance for implementation of Article 6 since adoption of the Paris Agreement. Just as Article 6 was the last provision Parties agreed upon when the Paris Agreement was adopted, its operationalization continues to defy a negotiated outcome. This discussion paper explores key areas of disagreement on Article 6, and explores possible outcomes from the upcoming Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26) in November 2021 in Glasgow.

2. Critical Issues under Negotiation

In the decision formally adopting the Paris Agreement and several provisions of the treaty itself, Parties set out mandates to elaborate decisions with operational details on a broad set of issues ranging from mitigation and adaptation to transparency, accounting, compliance, and assessment of progress (see Annex 1 for details).¹³ Scheduled to conclude during the Meeting of the Parties to the Paris Agreement (CMA) in December 2018 in Katowice, Poland,¹⁴ this process – formally known as the 'Work Program under the Paris Agreement' (PAWP)¹⁵ – resulted in a comprehensive set of decisions that are colloquially referred to as the 'Paris Rulebook.'¹⁶ One agenda item in this work program has eluded consensus so far, however: the operational details of Article 6.

Working through the Subsidiary Body for Scientific and Technical Advice (SBSTA), Parties have been locked for half a decade in negotiations on decisions that provide guidance on cooperative approaches under Article 6.2 and elaborate rules, modalities, and procedures for Article 6.4. Over this period, delegates have debated a succession of formal and informal texts of varying length, detail, and maturity, with numerous options and extensive bracketed text revealing the heterogeneity of views across Parties. Despite going into overtime during both COP24 in Katowice and COP25 in Madrid, Parties failed to bridge their differences on several key issues in the operationalization of Article 6, ultimately mandating SBSTA to build on existing progress and elaborate new recommendations for adoption during COP26 in Glasgow.¹⁷

Following an unprecedented hiatus in the climate negotiations due to the global pandemic caused by the novel coronavirus, Parties have scrambled to make up for lost time, yet a successful outcome at the Glasgow summit remains far from guaranteed. Discussions resumed in the second half of 2020, but remained informal, hampered by the virtual format. Despite a constructive series of multilateral consultations with Heads of Delegation (HoDs) and coordinators of regional negotiating groups convened by the COP25 and COP26 Presidencies, and informal technical expert dialogues hosted by the SBSTA Chair, apparent progress in 2021 has remained slow. Reviewing the outcomes of informal ministerial consultations in July 2021, the facilitators of those meetings warned that 'progress on Article 6 was well behind time, and any further delays on a deal in Glasgow on Article 6 might erode ambition, transparency, accountability, and support.'18

Parties have consistently identified a limited number of issues in the Article 6 negotiations that remained unresolved at the end of COP25.¹⁹ Among the most contested are:

- Accounting for Article 6.4 reductions generated outside the scope of host Party NDCs;
- generating finance from Article 6.2 to support adaptation action (share of proceeds);
- transitioning unused emission units generated before 2020 to meet NDC targets;
- ensuring overall mitigation in global emissions (OMGE) under Article 6.2; and
- baseline setting and additionality determination under the Article 6.4 mechanism.

According to the incoming Presidency of COP26, the first three topics have been singled out by Parties as highly political and thus 'most in need of ministerial level discussion.' Several submissions by Parties have also highlighted the relevance of the fourth and fifth topic, which, although they are

more technical in nature, justifies their inclusion in this discussion paper. While many other issues – including mostly technical issues, such as the reporting and review cycle or metrics for cooperative approaches, and more political issues, such as other uses of emission reductions or reference to respect for human rights – likewise remain unresolved, the issues highlighted here are seen by many to harbor the greatest potential for political gridlock in Glasgow and beyond.

Each of these critical issues will be described in greater detail in the following subsections, with a description of the substantive issues, the contending positions of key Parties and negotiating groups, and potential 'bridging options' that could enable a compromise outcome. On each issue, draft decision language proposed by the COP25 Presidency during the final day of negotiations in Madrid is included for reference, although it neither represented a consensus of views at the time, nor necessarily offers the most likely starting point for formal negotiations during COP26. Still, it provides a sense of what the COP25 Presidency considered possible 'landing zones' for compromise on key issues during the last formal Meeting of the Parties before the COVID-19 pandemic, and has been frequently cited by Parties in their submissions and statements since.

Annex 2 to this discussion paper underlies the analysis of Party views and of the possible scope for compromise. It collects the views of Parties and Party groupings which, by virtue of their membership or in some cases the intransigence or outlying nature of their negotiating positions, have exercised significant influence on the Article 6 negotiations to date. For these Parties and negotiating groups, Annex 2 traces the statements on the relevant negotiating issues, as reflected in formal and informal submissions on Article 6 compiled by the UNFCCC Secretariat since 2016. By reproducing selected passages of these submissions, Annex 2 also offers an – albeit only vestigial – means to trace the evolution of views and identify possible areas of convergence. Not all Parties and negotiating groups have filed submissions on all issues, however, and earlier positions may have changed in ways that are not documented in formal or informal submissions.²¹

Indeed, past negotiations have repeatedly shown that 'nothing is agreed until everything is agreed',²² meaning that an agreed outcome will often emerge as a result of mutual concessions and arrangements. How that process unfolds, and which Parties will be willing to relent on one or more concerns in return for accommodation of their central priorities, is often unpredictable. Still, the survey of stated positions provided in this discussion paper can serve as a helpful starting point to understand the interests and motivations of those actors whose agreement will be necessary to arrive at a workable compromise in Glasgow. With insufficient time to reset negotiations and begin the process afresh, these views and the deliberations in which they have been expressed – including the latest round of informal technical expert dialogues facilitated by SBSTA in September and October 2021 – provide a vital milepost for delegates to resume where they left off at COP25.

2.1 Accounting for Emission Reductions under Article 6.4

Description of Relevant Issue	Can emission reductions generated outside the scope of the NDC of a host Party be credited under Article 6.4, and, if so, does the host Party have to apply a corresponding adjustment (CA) to avoid double use?
Proposal by the COP25 Presidency ²³	70. A host Party shall apply a corresponding adjustment for all A6.4ERs first transferred consistent with [Article 6.2 guidance], subject to a future decision of the CMA that shall provide an opt out period, during which a host Party that first transfers A6.4ERs from sectors and greenhouse gases (among others) not covered by its NDC is not required to apply a corresponding adjustment. ²⁴
Breakdown of Disagreement	Parties in favor of allowing crediting of emission reductions outside the scope of the host Party NDC argue that doing so can raise mitigation ambition and build capacity for future expansion of the scope of the NDC. Many developing country Parties, in particular, oppose the need for a CA, pointing to the absence of a reference to a CA in Article 6.4,25 and arguing that it would require them to achieve additional emission reductions under their NDC, be unnecessary due to the inherent additionality of any mitigation outside the scope of the NDC, and undermine the nationally determined nature of NDCs.26 Parties in favor of excluding crediting of emission reductions outside the scope of the host Party NDC argue that doing so would result in a disincentive to expand the scope of the NDC over time. Hence, they argue, only covered reductions should be allowed, or alternatively a CA should be necessary for any emission reductions outside an NDC. In support of their position, these Parties – which include many advanced economies and the Least Developed Countries (LDC) Group – point to the importance of mitigation ambition under the Paris Agreement, and the need for progression in successive NDCs as inferred from Articles 3 and 4.3 of the Paris Agreement. Parties also diverge on a preliminary question, namely how to determine what is 'outside' the scope of an NDC. Most Parties consider it a reference to sectors or gases that are not covered by an NDC, while some Parties propose defining any mitigation activities in excess of those required to meet the NDC 'outside' the scope of that NDC.27 Finally, some Parties urged a distinction between being required to, and being allowed to, apply a CA for emission reductions from outside the scope of the NDC.
Compromise Options	During an informal technical expert dialogue on the issue in April 2021, the Chair of SBSTA invited discussion of a series of questions to help identify compromise options on the issue of double use of emission reductions from outside the NDC. A summary of this dialogue sets out several options with supporting arguments, including options at opposing ends of a spectrum between unconditionally allowing or altogether excluding any crediting from outside the scope of a host Party NDC, as well as several compromise options that would allow crediting subject to application of a CA after a specified date, greater transparency on the scope of NDCs, or restrictions on the use of units towards the NDC of another country. ²⁸

Most of these options had already been identified in March 2021 during the Presidencies' Consultations on Article 6 of the Paris Agreement.²⁹

A bridging option highlighted during discussions preceding the informal ministerial consultations in July 2021 would provide that units generated outside of the scope of NDCs would initially not be subject to corresponding adjustment, but only for a defined time period during which Parties to whom such flexibility applies would identify upfront whether an Article 6 activity is outside of scope of their NDCs. After this defined time period, all units, whether generated inside or outside of the scope of NDCs, would be subject to corresponding adjustment. Furthermore, a comprehensive tracking system using registries would assist in avoiding double counting, and additional limits could be agreed for activities taking place outside of the scope of NDCs.³⁰ Such a time-bound exemption from the requirement to undertake a CA had already been proposed by the COP25 Presidency in December 2019, however, and some Parties have since indicated that they do not consider it an acceptable compromise.³¹

Spectrum of Options and Party Views

No crediting outside NDC

Crediting allowed, but always requires Corresponding Adjustment Crediting allowed, Corresponding Adjustment required after a transition or opt

Crediting outside NDC allowed

EU, maybe: LDC Group

AILAC, EIG, Japan

AGN, AOSIS,

Brazil Arab Group, China

Analysis

On this negotiating issue, Parties endorsing very different outcomes have referred to the Paris Agreement to support their views, citing specific language - or the absence thereof - in Article 6, as well as its broader objectives and obligations contained in other treaty provisions. Ultimately, the Paris Agreement is not sufficiently determinate to allow for only one interpretation, and hence the balancing of competing considerations will need to occur by way of a political compromise. With the LDC Group possibly joining several developed countries in calls for a requirement that emission reductions outside the scope of a host country NDC be subject to a CA, the COP25 Presidency proposal - complemented by improved transparency and tracking - arguably offers a starting point for compromise, and shifts the focus of negotiation to conditions of use and possible opt-out timelines, which could be deferred beyond COP26. Insistence by Brazil and the Like-Minded Developing Countries (LMDCs) on a more expansive definition of the boundaries of NDCs - according to which any 'additional' emissions reductions automatically fall outside the scope of an NDC - met with strong opposition at COP25, however, and could yet derail agreement.

2.2 Share of Proceeds

Description of Relevant Issue	Should transfers of ITMOs from cooperative approaches under Article 6.2 generate finance to support adaptation action through a share of proceeds (SOP)? ³²
Proposal by the COP25 Presidency	37. Recalling Article 6, paragraph 1, participating Parties using cooperative approaches are strongly encouraged to commit to contribute resources to adaptation, primarily through contributions to the Adaptation Fund, and to contribute commensurate with the rate delivered under the mechanism established by Article 6, paragraph 4, to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation. ³³
Breakdown of Disagreement	Many Parties, notably developing country Parties and negotiating groups, have called for mandatory SOP on Article 6.2 activities to ensure balance between Articles 6.2 and 6.4. Arguments cited in support of this position include the wording of Article 6.1, which – as a 'chapeau' to Article 6 – mentions adaptation; the need to ensure that one form of voluntary cooperation does not end up disadvantaging or outcompeting the other, possibly even incentivizing circumvention of an SOP via Article 6.2; and the need to secure sufficient finance for adaptation. Other Parties – mostly developed countries – have argued that an SOP for Article 6.2 was discussed and expressly omitted in the Paris Agreement, that imposing a mandatory SOP would discourage mitigation action, and that it could prove unworkable for certain types of cooperation, such as linked emissions trading systems or ITMOs that do not represent tradeable units. Some Parties have also highlighted that voluntary contributions to the Adaptation fund have significantly exceeded the monetary flows achieved to date through SOP under the CDM. ³⁴ Seeking middle ground, some Parties have indicated they would accept a voluntary option – expressed through exhortatory language and possibly an encouragement to commit to a SOP, as well as mandatory reporting of any SOP delivered – in guidance on Article 6.2, but other Parties have questioned whether such a voluntary approach would generate sufficient and predictable revenue flows for adaptation finance, and have also referenced the extension of a mandatory SOP from the CDM to the other flexibility mechanisms of the Kyoto Protocol under the Doha Amendment. Other issues on which views diverge are the beneficiaries of levied funds, the nature of the SOP as a monetary levy or a levy of units, and the process through which these are expended, with some Parties favoring a contribution to the Adaptation Fund, and other Parties preferring flexibility to contribute adaptation finance to other funds and bi- or multilateral chann
Compromise Options	Given the divergence in views, no clear bridging option emerged during the informal ministerial consultations in July 2021. With its exhortatory language – 'strongly' encouraging Parties to 'commit to contribute resources

to adaptation' at a rate commensurate to that to be specified under Article 6.4 – the third iteration of the COP25 Presidency proposal already outlined a potential compromise, although some Parties have indicated that 'it cannot be a basis for further compromises.' Earlier iterations had also identified an option requiring adaptation finance to be provided directly, rather than through Article 6.2. In the July 2021 informal ministerial consultations, different variations of voluntary encouragement to deliver – or commit to deliver – an SOP were mentioned, along with mandatory reporting requirements for Article 6.2 and ways to limit the scope of an SOP to certain activities, for instance baseline-and-crediting activities, to acknowledge the differences between Article 6.2 and 6.4.37

Spectrum of Options and Party Views

No Share of Proceeds required for Article 6.2

Australia, Canada, Japan, New Zealand, USA

Share of Proceeds is voluntary for Article 6.2

Article 6.2

AGN, AOSIS, Arab Group, Brazil, China, India, LDC Group

Analysis

Again, Parties on both sides of the disagreement over whether to require delivery of an SOP for cooperative approaches under Article 6.2 have invoked the Paris Agreement, either citing specific text or the absence thereof, or more broadly recruiting the general objectives of the Paris Agreement. Some have argued that the introduction of an SOP at this stage is an attempt to retroactively introduce a requirement that failed to find agreement during the negotiations on the Paris Agreement, while others reference the expansion of an SOP to all mechanisms of the Kyoto Protocol through the Doha Amendment, which entered into force in 2020.³⁸ For a breakthrough at COP26, this issue will require another political compromise, and the sheer number of Parties calling for a mandatory SOP has a strong prospect of prevailing with insistence on at least some mandatory elements in Article 6.2 guidance. Attention will then likely shift to questions such as the types of ITMOs subject to delivery of an SOP, the rate at which an SOP is levied, whether it is levied in kind or in monetary terms, and other modalities of implementation and disbursement.

2.3 Transition of Unused Emission Units

Description of Relevant Issue	Should Certified Emission Reductions (CERs) generated before 2020 under the Clean Development Mechanism (CDM) of the Kyoto Protocol be eligible for use towards NDCs? ³⁹
Proposal by the COP25 Presidency	75. CERs issued under the CDM may be used towards the NDC of the CDM host Party or a participating Party in accordance with all of the following conditions: (a) The CDM project activity or CDM programme of activities was registered on or after a date to be determined by the CMA;
	 (b) The CERs were issued in respect of emissions reductions or removals achieved prior to or on 31 December 2020; (c) The CERs are used towards the NDC by no later than 31 December 2025;
	(d) The CDM host Party shall not be required to apply a corresponding adjustment consistent with [Article 6.2 Guidance] in respect of the CERs identified as to be used by 31 December 2025 pursuant to (c) above;
	(e) The participating Party using the CERs towards its NDC shall apply corresponding adjustments consistent with [Article 6.2 Guidance]; (f) The CERs shall be identified as pre-2021 CERs in the CDM host Party and participating Party's reporting in accordance with decision 18/CMA.1. 76. CERs that do not meet the conditions of paragraph 75 above are in reserve and
	may only be used towards NDCs in accordance with a future decision of the CMA. ⁴⁰
Breakdown of Disagreement	Many Parties and Party groupings— such as AILAC, AOSIS, the EU, and the LDC Group— have strongly opposed any use of CERs generated before 2020 to meet NDC targets, highlighting the significant overhang of such units and the risks posed by allowing their use for achievement of the temperature stabilization targets of the Paris Agreement, as well as for the price of future units issued under Article 6.4. Other Parties, including several major emitters, have emphasized the importance of an unrestricted carryover of units to retain investor confidence. Proposals to find middle ground by specifying cut off dates for the issuance of units or the registration of underlying activities, a deadline for the use of legacy units, quantitative limits on the number of units that may be carried over, or restrictions on the countries that generated or may use units towards NDCs, have been mostly rejected as arbitrary by those Parties holding a significant number of unsold CERs.
Compromise Options	During informal consultations on this issue held in June 2021, Parties discussed all options on the spectrum from no to unrestricted carryover, along with the various intermediate options described above. Potential bridging options identified during the informal ministerial consultations in July 2021 included specifying a cut-off date based on the vintage of units or registration year of activities to limit the volume of CERs issued before 2020 that would be eligible to meet NDC targets. Further suggestions included allowing such units to be used until a cut-off date, moving units

into a reserve or retagging them, making their use conditional on transparent reporting, and addressing the issue under negotiations on enhanced action prior to 2020. As such, the options under discussion during 2021 have not evolved significantly from those already included in the third iteration of the COP25 Presidency proposal.

Spectrum of Options and Party Views

4				
	No transition of legacy units	Condition	onal transition of legacy units with cut off dates and other limitations	Automatic transition of legacy units
	AGN, AILAC, AOSIS, LDC	EU	USA, Japan	Arab Group, Australia, Brazil, China, India
	Group,			

Analysis

Although Parties have cited the absence of supporting language in the Paris Agreement to justify their opposition against a transition of legacy units, the question is recognized to be less a legal and rather a political issue. 41 In the end, a compromise will have to balance the concerns about ambition and environmental integrity voiced by a majority of Parties, and the economic interest of a minority of Parties who hold large volumes of legacy units and insist on capturing some of their economic value. Full carryover of such units is hardly defensible in view of the expected impact on climate ambition, yet recent analyses have also provided greater clarity about the actual volumes of legacy units at stake under each option. Whereas earlier third-party analyses suggested that unrestricted carryover of CERs could weaken pledged ambition under the Paris Agreement by almost 40%,42 more recent data provided by the UNFCCC Secretariat as well as independent researchers show that potential CER volumes issued by 2020 are at a more conservative end of estimates, and would decrease substantially if older vintages are excluded by limiting carryover to CERs issued under projects registered after 2013 or 2016.⁴³ If a compromise can be found, it will likely involve a limited transition that provides some economic value to project developers holding legacy units, but does not flood future markets and severely undermine ambition under the Paris Agreement. With unit holders standing to lose most from a failure to compromise, they have a strong incentive to accept some limitations.

2.4 Overall Mitigation in Global Emissions

Description of Relevant Issue	Should the mandate to deliver overall mitigation in global emissions contained in Article 6.4 apply to cooperative approaches under Article 6.2, and does that require applying a discount to the transfer of ITMOs? ⁴⁴
Proposal by the COP25 Presidency	39. Participating Parties and stakeholders are strongly encouraged to cancel ITMOs to deliver an overall mitigation in global emissions that is commensurate with the scale delivered under the mechanism established by Article 6, paragraph 4, and that is not counted towards any Party's NDC or for other international mitigation purposes. 40. Each participating Party shall report as part of their biennial transparency reporting, in accordance with chapter IV.C (Regular information) on any delivery of overall mitigation in global emissions related to its participation in cooperative approaches. ⁴⁵
Breakdown of Disagreement	Some Parties reject application of OMGE to Article 6.2 by pointing to the wording of that provision, and also highlighting the exhortatory nature of OMGE in Article 6.4. Many developing country Party groupings, by contrast, invoke the chapeau of Article 6.1 and the need for balance between Article 6.2 and Article 6.4 ⁴⁶ to support mandatory cancellation, whereas some support achieving OMGE through voluntary cancellation to ensure that buying Parties carry the costs of cancellation. ⁴⁷
Compromise Options	In the draft decision on Article 6.2 guidance released by the COP25 Presidency during the last day of the Madrid climate summit, the proposed compromise would have kept the application of OMGE to Article 6.2 voluntary by only 'strongly encouraging' Parties to cancel ITMOs in an amount commensurate with the scale of OMGE applied under Article 6.4. Consultations by the Presidencies of COP25 and 26 in March 2021 did not result in new bridging options. ⁴⁸
S	pectrum of Options and Party Views
No OMGE is required for Artic	
Analysis	EU, AILAC, AOSIS AGN, LDC Group Like mandatory delivery of an SOP under Article 6.2, OMGE could pose difficulties for linked emissions trading systems, although technical solutions for these exist. Still, proponents argue a need for balance between Article 6.2 and 6.4, and the importance of a net benefit for the
	climate. As with the SOP, voluntary or differentiated solutions to OMGE may be the only viable compromise.

2.5 Baselines and Additionality

Description of Relevant Issue	What are appropriate principles and approaches for defining baselines and additionality under Article 6.4?
Proposal by the COP25 Presidency	36. The CMA shall adopt principles for methodologies and haseline and additionality approaches.
Breakdown of Disagreement	Fault lines between Party views have revolved around whether determination of baselines and additionality under Article 6.4 will extend past practices under the CDM, or adopt a more dynamic approach to reflect the long-term mitigation ambition under the Paris Agreement. Parties disagree on the approach to baseline setting, with suggested options including reference to a) host Party conditions, such as historical, projected, or Business-as-Usual (BaU) emissions; b) a host Party decision; or c) the relevant technology itself, based on a performance standard, benchmark, or Best Available Technology (BAT). ⁴⁹ Not all Parties backed a single approach, with some endorsing differentiation based on the economic capacity of the respective host country. ⁵⁰ On additionality, Parties have converged around a regulatory additionality test, meaning that activities are only additional if they are not mandated by national laws and policies, but divisions remain on the need for an investment test and distinction between conditional and unconditional NDC elements.
Compromise Options	While earlier iterations of the COP25 Presidency draft decision text on Article 6.4 had proposed a hierarchical or menu-based approach to baselines, reflecting different Party positions, ⁵¹ the third and final iteration limited itself to mandating the CMA with adoption of principles, deferring any operational language to future decisions. Earlier options varied in terms of mitigation ambition and the flexibility to accommodate relevant national, regional or local circumstances. On additionality, options had included a regulatory, an investment, and a combined test.
S	pectrum of Options and Party Views
Greater mitigation a EIG, EU, Japan, LD0	
Analysis	Although highly technical in nature, discussions on baselines and additionality are central to the integrity of Article 6.4 as a mechanism to enhance ambition. Some convergence on principles has been achieved, although the large number of different approaches suggests that any compromise will ultimately entail a menu or hierarchy of options.

3. Implications for a Potential Compromise

When Parties were unable to reach agreement on operational decisions for Article 6.2 and 6.4 at COP24 in Katowice, the sheer volume of unresolved technical questions, reflected in draft negotiating texts replete with competing options and extensive bracketed text, was blamed for the unsatisfactory outcome. By COP25 in Madrid one year later, progress had been achieved on many of the technical issues, but negotiations ultimately derailed due to a more limited number of political rather than technical disagreements: the fault lines featured in this discussion paper. As the informal consultations and technical dialogues convened since December 2019 have shown, these divisions – reflecting not only divergent circumstances and economic interests, but also very different understandings of the nature and objectives of Article 6 and the Paris Agreement more generally – remain deeply entrenched.

Given the inability to convene formal negotiations and reach even preliminary closure on any of the underlying matters, these divisions are being carried forward to COP26 in Glasgow largely unresolved. That does not necessarily mean that agreement is entirely out of reach: on virtually every question, several compromise options have been identified and extensively discussed. 'Bridging proposals' outlined at an informal ministerial meeting in July 2021, for instance, were welcomed by several Parties. Still, not all Parties felt that these proposals adequately reflected their interests or concerns, and each of the compromise options will require a second tier of decisions – on carryover conditions and timelines, for instance – that are themselves contested and risk reintroducing broader divisions.

In effect, many of the 'bridging proposals' reflect compromise options already present in the draft decision texts released by the COP25 Presidency. Not only did these fail to garner consensus among Parties, however, but the aspired balance of priorities it reflected delegated difficult choices to secondary details and future decisions. As the history of Article 6 has shown, fundamental disagreements on matters of principle have a tendency of manifesting themselves even in the most technical minutiae, often seeing Party views resurface that had been supposedly conceded when the Paris Agreement was originally adopted. If Parties were already unable to agree to compromise options back then that largely resemble those currently under discussion, what hope is there for a more successful outcome in November 2021?

One hope comes from the markedly improved knowledge base regarding the environmental and economic implications of alternative compromise options compared to 2019. Uncertainty about potential volumes of CERs and other units issued under the Kyoto Protocol by the end of 2020, for instance, was cited by several Parties as a reason for their inability to agree to suggested compromise options, and some have even conceded they would 'potentially be open to changing their positions' based on more robust data. ⁵² Calls for more reliable analysis have been met from various sides, with research and environmental advocacy groups presenting several of the early analyses, and the UNFCCC Secretariat more recently following with its own guidance. Whereas early reports cautioned against the potentially dire implications of some Party demands such as unlimited carryover of legacy CERs or unrestricted crediting of mitigation efforts outside the scope of NDCs, newer data has

revealed more manageable risks for environmental integrity under some proposed compromise options (Box 1).

On the contested issue of a transition of legacy CERs, Parties at COP25 in December 2019 faced a wide range of estimates regarding unused legacy CERs, with limited clarity regarding the underlying assumptions, such as different data sources, different assumptions on technical performance of projects and the implementation status of projects, as well as different demand and price assumptions.⁵³ One analysis by a non-governmental research institute, released in the final days of COP25, warned that carryover of legacy units - estimated at 4.65 billion CERs - could 'fatally undermine the Paris Agreement' and weaken mitigation efforts pledged under NDCs at the time by 38%.⁵⁴ A later analysis commissioned by the LDC Group assessed several compromise options under discussion for legacy CERs, and projected a potential increase in global GHG emissions of zero MtCO₂e in a scenario with no transition of legacy units, of 63 MtCO₂e if CERs issued under projects registered on or after 1 January 2016 were allowed to transition, and of 320 MtCO₂e if CERs issued under projects registered on or after 1 January 2013 are allowed to transition.⁵⁵ More recently, the UNFCCC Secretariat has estimated the maximum number of potential CERs up to the end of 2020 at almost 3,405 billion CERs, but sees the volume decrease by over 90% to 173 MtCO2e if only CERs from activities registered since 2013 are allowed to transition, and to 50 MtCO₂e if only CERs issued under projects registered since 2016; likewise, an analysis of project level data found that a maximum of 0.95 billion unused CERs have been issued to date, and that a cut-off date of 2013 would reduce the volume to 25 million, and a cut-off date of 2016 would reduce it further to just 9 million.⁵⁶ Later assessments of potential volumes have thus been considerably more conservative, and also illustrate the environmental integrity implications of alternative compromise options.

Box 1: Evolving Knowledge Base on the Implications of a Legacy Unit Carryover

With increasing clarity about the implications of alternative compromise options, Parties may find that they now have a more robust basis for compromise. Such progress in the exploration of opportunities for compromise as well as improved understanding of their consequences will hopefully have improved prospects for an agreement since COP25 in Madrid. At the same time, every compromise option possesses unique tradeoffs, and no option will satisfy all Parties in equal measure. Another area where the informal discussions since 2019 may have helped improve prospects for agreement is better knowledge of Party positions: since Parties and negotiating groups have had additional opportunity to clarify their priorities and concerns, they will also have developed a better sense for the 'red lines' of other delegations, making it easier to envision potential landing zones based on reciprocal concessions and bargaining across different agenda items. Some flexibility will clearly be essential for a negotiated outcome, and the potential boundaries of such a process are considered in the final section. First, however, the next section explores the implications of a failure to reach agreement at COP26 in Glasgow.

4. Implications of a Failure to Compromise

Given the permissive nature of international law,⁵⁸ anything Parties fail to agree on will, by default, remain within their sovereign discretion. Consequently, when the European Union argued during COP25 that an absence of rules to operationalize Article 6 would not necessarily prevent parties from engaging in voluntary cooperation through carbon markets,⁵⁹ it correctly described the legal implications of a failure to reach agreement on the ability to transfer ITMOs through cooperative activities under Article 6.2. Indeed, the wording of Article 6.2 intentionally calls for cooperative approaches to be implemented 'consistent with guidance', rather than 'subject to guidance', which would have implied conditionality on the adoption of such guidance. Rather, because Article 6.2 relies on Parties for its implementation and does not otherwise depend on centralized governance processes or institutions, cooperative approaches will likely remain viable even if Parties fail to reach a compromise during COP26 in Glasgow.

Already, a number of Parties and international organizations are piloting cooperative approaches under Article 6 to explore the opportunities offered by this policy mechanism and to inform the further development of operational rules. Most piloting activities focus on capacity building, establishing the necessary infrastructure, and creating an enabling environment for engagement in Article 6 transfers. Multilateral initiatives such as the Transformative Carbon Asset Facility (TCAF) established by the World Bank, or the Article 6 Support Facility operated by the Asian Development Bank (ADB), aim to provide developing countries with capacity building and technical support to help them develop and test mitigation projects under Article 6. At the bilateral level, only a few pilot initiatives have progressed to the implementation phase, with Switzerland signing the first bilateral agreement – a mitigation outcome purchase agreement (MOPA) – with Peru in late 2020, and Japan entering into bilateral and commercial agreements on ITMO transfers with partner countries and project developers through its already existing Joint Crediting Mechanism (JCM). Despite their early stages of development, piloting activities have already yielded a number of valuable insights for the practical operation of Article 6 (Box 2).

As of October 2021, the Article 6 Pilot Pipeline Database maintained by the UNEP DTU Partnership listed 45 pilot activities in over 20 countries, with funding for these activities originating from Canada, Germany, Japan, Sweden, Switzerland, the United Kingdom, as well as the Nordic Environment Finance Corporation (NEFCO), Asian Development Bank (ADB), African Development Bank (AfDB), and the World Bank. ⁶² Additional actors, such as the Global Green Growth Institute (GGGI), are in the process of developing their own initiatives. ⁶³ Through these various activities, over US\$ 1.37 billion have been committed to Article 6 piloting activities, with the vast majority of these activities falling under Article 6.2 of the Paris Agreement. ⁶⁴ A periodic mapping exercise conducted under the Climate Finance Innovators project has identified a number of common patterns and tentative lessons from these piloting activities for the further operationalization and future implementation of Article 6.⁶⁵

First, piloting activities can be distinguished by whether they explicitly aim at generating ITMOs or adaptation benefits (ABs) under Article 6, merely seek to foster or promote an enabling environment

for Article 6 implementation, or are not intended as Article 6 activities, yet are still likely to be covered by its rules and procedures, such as linked emissions trading systems (ETS) enabling international transfers of emission allowances between Parties.⁶⁶

Second, most of these activities are currently still in a preparatory phase, with few having progressed to actual piloting or full implementation.⁶⁷ To date, aside from existing ETS linkages, the Joint Crediting Mechanism (JCM) implemented by Japan together with more than a dozen host countries is the only activity that has reached the full implementation phase.⁶⁸

Third, contractual structures have been diversified, but share a focus on environmental integrity, for instance by including provisions on the avoidance of double counting of mitigation outcomes, enhancement of NDC ambition in the host country, sharing of benefits and prevention of overselling, and applying robust methodologies for baseline and additionality.⁶⁹

Fourth, piloting activities have reflected the changed incentive structure under the Paris Agreement, with host countries showing greater reluctance to commit to a transfer of mitigation outcomes they may eventually need to meet their own NDCs. Accordingly, the initiative to cooperate has typically originated with the prospective buyer countries.⁷⁰

Fifth, and finally, while uncertainty about the operational details of Article 6 has slowed down the pace of new piloting activities, a successful conclusion of Article 6 negotiations is clearly 'not seen as a necessary condition for the continuation of Article 6 pilots', with some countries expressly identifying the accounting rules adopted in 2018 under the Enhanced Transparency Framework of the Paris Agreement⁷¹ as a sufficient basis for voluntary cooperation.⁷²

Box 2: Pilot Projects under Article 6 of the Paris Agreement: Early Insights

While cooperative approaches under Article 6.2 will most likely proceed in the absence of a negotiated outcome during COP26, failure to reach agreement on the rules, modalities and procedures for Article 6.4 would mean that the latter cannot be operationalized. With its more centralized architecture, Article 6.4 relies on a supervisory body for its operation, which, in turn, is subject to the authority and guidance of the CMA. Because of existing uncertainties about the legal status of the flexibility mechanisms under the Kyoto Protocol after 2020, inability to adopt operational details on Article 6.4 could prove particularly destabilizing for the international offset credit market. Such uncertainty, in turn, can detrimentally affect the ability of countries to anticipate the role of Article 6.4 in their updated NDCs and NDC implementation. The stakes for an agreed outcome in Glasgow are thus disproportionately higher for Article 6.4.

5. Outlook

While operational details on Article 6 have eluded agreement ever since the Paris Agreement was first adopted, interest in market approaches to climate change mitigation has continued to grow apace. From the steady expansion of domestic emissions trading systems to record levels of activity in the voluntary carbon market and, more recently, a number of emerging Article 6 pilot initiatives, this momentum might be expected to translate into pressure for a successful outcome in Glasgow. Indeed, uncertainty created by the absence of operational details on Article 6 has contributed to a decreased rate of new piloting activities,⁷⁴ and may have even affected the extent to which Parties are considering use of Article 6 in their newly updated NDCs. If the aspiration of Article 6 – according to its wording – is to 'allow for higher ambition in [Parties'] mitigation and adaptation actions', then lacking uptake could impede more ambitious pledges. For that aspiration to be realized, however, Article 6 has to secure a high standard of environmental integrity.

Experience with earlier carbon markets – including, in particular, the CDM – leaves little doubt that robust governance, both at the multilateral level and in the bilateral arrangements between Parties, will be critical for the enduring viability of Article 6. If its operationalization is unable to ensure alignment with the temperature stabilization goals of the Paris Agreement, it will only be a matter of time before flawed or fraudulent activities are revealed to the public and confidence in the market dwindles, as it already did once under the Kyoto Protocol. That does not, however, mean that negotiators should always err on the side of the most ambitious option for each issue currently under discussion. While the 'San José Principles for High Ambition and Integrity in International Carbon Markets'⁷⁵ may have commendable intentions, for instance, some of the principles, if interpreted and applied literally, could effectively prevent Article 6 from fulfilling its potential to enable ambition by lowering the cost of achieving mitigation targets.⁷⁶

A balance between stringency and flexibility is therefore essential. Still, whether Parties at COP26 can overcome their past divisions to achieve a balanced outcome is everything but certain. With all other elements of the 'Paris Rulebook' finalized, concerns and preferences that Parties were willing to set aside in the interest of a successful result in Katowice, including deeply held views about the nature and objectives of the Paris Agreement, risk being drawn to the surface during negotiations on Article 6. Already, as the analysis in this discussion paper has shown, Parties are alternatingly invoking specific provisions of the Paris Agreement and general principles and objectives to justify their position, echoing the recursive argumentation patterns of international relations more generally.⁷⁷ Yet agreement is not altogether out of reach. Despite the long hiatus in formal negotiations occasioned by the global coronavirus pandemic, Parties have not remained idle since COP25. As they reconvene in Glasgow, they will be equipped with both a better understanding of the implications of alternative policy choices, and a better sense of the viewpoints and positions of their fellow Parties. Improved knowledge may, in the end, be the key to unlock the transformational potential of Article 6 later this year in Glasgow.

Bibliography

- Ahlberg, Malin. 2018. 'Enhancing Ambition: Carbon Pricing as a Tool to Step up Mitigation Efforts.' Carbon Mechanisms Review 6(3): 22–25.
- Asian Development Bank (ADB). 2020. 'Decoding Article 6 of the Paris Agreement: Version II.' Manila: Asian Development Bank (ADB). http://dx.doi.org/10.22617/TIM189218-2.
- Asselt, Harro van, Kati Kulovesi, and Michael A. Mehling. 'Negotiating the Paris Rulebook: Introduction to the Special Issue.' 2018. *Carbon & Climate Law Review* 12(3): 173–83. https://doi.org/10.21552/cclr/2018/3/3.
- Climate Analytics. 2019. 'Article 6 Needs Ambition, not Time Wasting: The Carryover of Pre-2020 Credits Could Fatally Undermine the Paris Agreement.' Berlin: Climate Analytics. https://climateanalytics.org/media/carry_over_ca_briefing_11dec2019.pdf.
- Edmonds, James E., Sha Yu, Haewon McJeon, Dirk Forrister, Joseph E. Aldy, Nathan Hultman, Ryna Cui, et al. 2021. 'How Much Could Article 6 Enhance Nationally Determined Contribution Ambition toward Paris Agreement Goals through Economic Efficiency?' *Climate Change Economics* 12(2): 2150007. https://doi.org/10.1142/S201000782150007X.
- Environmental Defense Fund (EDF). 2018. 'Catalyzing Carbon Markets Globally to Realize the Promise of Paris: The Power of Markets to Increase Ambition.' Washington, DC: Environmental Defense Fund (EDF). https://unfccc.int/sites/default/files/resource/236_Talanoa%20submission%20carbon%20 markets%20potential%20EDF%20April%203.pdf.
- Fearnehough, Harry, Lambert Schneider, Claire Fyson, Carsten Warnecke, Kristin Qui, and Matthew Gidden. 2021. 'Analysis of Options for Determining OMGE, SOP and Transition within Article 6: Implications of Policy Decisions for International Crediting under the Paris Agreement.' Berlin: Climate Analytics. https://www.oeko.de/fileadmin/oekodoc/Analysis-of-options-for-determining-OMGE-SOP-Transition-within-Article-6_May2021.pdf.
- Greiner, Sandra, Andrew Howard, Thiago Chagas, and Tobias Hunzai. 2017. 'CDM Transition to Article 6 of the Paris Agreement: Options Report.' Bonn et al.: Koru Climate and Climate Focus.

 https://www.climatefocus.com/sites/default/files/CDM%20Transition%20Options%20Report%20v2.0.pdf.
- Greiner, Sandra, Nicole Krämer, Federico de Lorenzo, Axel Michaelowa, Stephan Hoch, and Juliana Kessler. 2020. 'Article 6 Piloting: State of Play and Stakeholder Experiences.' Berlin: Climate Focus. https://www.climatefocus.com/sites/default/files/Climate-Finance-Innovators_Article-6-piloting_State-of-play-and-stakeholder-experiences_December-2020.pdf.
- Greiner, Sandra, Thiago Chagas, Nicole Krämer, Axel Michaelowa, Dario Brescia, and Stephan Hoch. 2019. 'Moving Towards Next Generation Carbon Markets: Observations from Article 6

- Pilots.' Berlin: Climate Focus et al. https://www.carbon-mechanisms.de/fileadmin/media/dokumente/Publikationen/Studie/Studie_2019_CFI_Article_6_Pilots.pdf.
- Hoch, Stephan, Sandra Greiner, El-Hadji Mbaye Diagne, Axel Michaelowa, Nicole Krämer, Aglaja Espelage, and Ruth Kassaye. 2020. 'Closing the Deal on "CDM Transition": How COP 25 Defined New Guardrails for Compromise and what They Mean for Africa.' Freiburg: Perspectives Climate Group. https://www.climatefinanceinnovators.com/wp-content/uploads/2020/05/Closing-the-deal-on-CDM-Transition_web.pdf.
- Howard, Andrew. 2017. 'Voluntary Cooperation (Article 6).' In *The Paris Agreement on Climate Change: Analysis and Commentary*, edited by Daniel Klein, María Pía Carazo, Meinhard Doelle, Jane Bulmer, and Andrew Higham, 178–95. Oxford, New York: Oxford University Press.
- IISD Reporting Services. 2021. 'Summary of the May-June 2021 Climate Change Conference: 31 May-17 June 2021.' Earth Negotiations Bulletin 12(780). https://enb.iisd.org/sites/default/files/2021-06/enb12780e.pdf.
- IISD Reporting Services. 2019. 'Summary of the Chile/Madrid Climate Change Conference: 2-15 December 2019.' *Earth Negotiations Bulletin* 12(775). https://enb.iisd.org/events/chilemadrid-climate-change-conference-december-2019/summary-report-2-15-december-2019.
- International Emissions Trading Association (IETA). 2018. 'IETA Input to the Talanoa Dialogue'. International Emissions Trading Association (IETA). https://unfccc.int/sites/default/files/resource/94_IETA%20input%20to%20TD_final.pdf.
- Karschunke, Karsten, Thomas Forth, and Axel Michaelowa. 2021. 'Operationalizing Article 6.8 & 6.9 of the Paris Agreement.' Berlin: Deutsche Emissionshandelsstelle (DEHSt). https://www.carbon-mechanisms.de/fileadmin/media/dokumente/Publikationen/Bericht/A_6.8_6.9_Virtual_se minar_Key_messages.pdf.
- Koskenniemi, Martti. 2006. From Apology to Utopia: The Structure of International Legal Argument. Cambridge: Cambridge University Press.
- Lo Re, Luca, and Jane Ellis. 2021. 'Operationalising the Article 6.4 Mechanism: Options and Implications of CDM Activity Transition and New Activity Registration.' Climate Change Expert Group Paper No. 2021(2). Paris: Organisation for Economic Co-operation and Development (OECD)/International Energy Agency (IEA). https://doi.org/10.1787/08ce04ee-en.
- Marcu, Andrei and Virender K. Duggal. 2019. 'Negotiations on Article 6 of the Paris Agreement: Road to Madrid.' Manila: Asian Development Bank (ADB). https://www.adb.org/sites/default/files/publication/541016/sdwp-063-negotiations-article-6-paris-agreement.pdf.

- Mehling, Michael A. 2020. 'Governing Cooperative Approaches under the Paris Agreement.' *Ecology Law Quarterly* 46(3): 765-828. https://doi.org/10.15779/Z389G5GD97.
- Mehling, Michael A., Gilbert E. Metcalf, and Robert N. Stavins. 2018. 'Linking Heterogeneous Climate Policies (Consistent with the Paris Agreement).' *Environmental Law* 48(4): 647–98.
- Michaelowa, Axel, Hanna-Mari Ahonen, and Aglaja Espelage. 2021. 'Setting Crediting Baselines under Article 6 of the Paris Agreement', Carbon Market Mechanisms (CMM) Working Group Discussion Paper. Freiburg: Perspectives. https://www.carbon-mechanisms.de/fileadmin/media/dokumente/Publikationen/Policy_Paper/Setting_crediting_baselines_under_Article6.pdf.
- Michaelowa, Axel, Philipp Censkowsky, Aglaja Espelage, Aayushi Singh, Regina Betz, Raphaela Kotsch, and Tim Dzukowski. 2021. 'Volumes and Types of Unused Certified Emission Reductions (CERs).' Freiburg et al.: Perspectives and Zurich University of Applied Sciences (ZHAW). https://www.zhaw.ch/storage/sml/institute-zentren/cee/PCG-ZHAW_unused_CERs_final_clean_PAC.pdf.
- Michaelowa, Axel, Juliana Kessler, Aglaja Espelage, and Hanna-Mari Ahonen. 2021. 'Best Available Technology and Benchmark Baseline Setting under the Article 6.4 Mechanism.' Freiburg: Perspectives.

 https://www.perspectives.cc/public/fileadmin/user_upload/BAT_in_6.4_discussion_paper_30.08.21_final.pdf.
- Michaelowa, Axel, Aglaja Espelage, and Benito Müller. 2020. 'Negotiating Cooperation under Article 6 of the Paris Agreement: 2020 Update.' Policy Brief. Oxford: European Capacity Building Initiative (ECBI). https://ecbi.org/sites/default/files/Article%206%202020.pdf.
- Michaelowa, Axel, Sandra Greiner, Aglaja Espelage, Stephan Hoch, and Nicole Krämer. 2019. 'Operationalizing the Share of Proceeds under Article 6.' Amsterdam et al.: Climate Focus and Perspectives. https://www.climatefinanceinnovators.com/wp-content/uploads/2019/06/Operationalizing-the-SoP_web.pdf.
- Michaelowa, Axel, Lukas Hermwille, Wolfgang Obergassel, and Sonja Butzengeiger. 2019. 'Additionality Revisited: Guarding the Integrity of Market Mechanisms under the Paris Agreement.' *Climate Policy*, 19(10): 1211-1224. https://doi.org/10.1080/14693062.2019.1628695.
- Mraz, Marian. 2021. 'Identifying Potential Policy Approaches under Article 6 of the Paris Agreement.'
 Seoul: Global Green Growth Institute.
 https://gggi.org/site/assets/uploads/2021/01/Policy-Approaches-under-PA-Article-6210121.pdf.
- Müller, Benito. 2018. 'Article 6: Market Approaches under the Paris Agreement.' Policy Brief. Oxford: European Capacity Building Initiative (ECBI). https://ecbi.org/news/article-6-market-approaches-under-paris-agreement.

- Rajamani, Lavanya and Daniel Bodansky. 2019. 'The Paris Rulebook: Balancing International Prescriptiveness with National Discretion.' *International and Comparative Law Quarterly* 68(4): 1023-1040. doi:10.1017/S0020589319000320.
- Schneider, Lambert, Carsten Warnecke, Thomas Day, and Aki Kachi. 2018. 'Operationalising an "Overall Mitigation in Global Emissions" under Article 6 of the Paris Agreement.' Berlin: NewClimate Institute. https://newclimate.org/wp-content/uploads/2018/11/Operationalising-OMGE-in-Article6.pdf.
- United Nations Environment Programme (UNEP). 2020. 'The Emissions Gap Report 2020.' Nairobi: UNEP. https://www.unep.org/emissions-gap-report-2020.
- World Bank. 2021. State and Trends of Carbon Pricing 2021. Washington, DC: World Bank. https://doi.org/10.1596/978-1-4648-1728-1.
- World Bank, Ecofys, and Vivid Economics. 2016. State and Trends of Carbon Pricing 2016. Washington, DC: The World Bank. https://doi.org/10.1596/978-1-4648-1001-5.

Annex 1: Relevant Excerpts of Article 6 of the Paris Agreement and Decision 1/CP.21

Article 6 of the Paris Agreement

- 1. Parties recognize that some Parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity.
- 2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement.
- 3. The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement shall be voluntary and authorized by participating Parties.
- 4. A mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development is hereby established under the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Agreement for use by Parties on a voluntary basis. It shall be supervised by a body designated by the Conference of the Parties serving as the meeting of the Parties to this Agreement, and shall aim:
 - (a) To promote the mitigation of greenhouse gas emissions while fostering sustainable development;
 - (b) To incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities authorized by a Party;
 - (c) To contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used by another Party to fulfil its nationally determined contribution; and
 - (d) To deliver an overall mitigation in global emissions.
- 5. Emission reductions resulting from the mechanism referred to in paragraph 4 of this Article shall not be used to demonstrate achievement of the host Party's nationally determined contribution if used by another Party to demonstrate achievement of its nationally determined contribution.
- 6. The Conference of the Parties serving as the meeting of the Parties to this Agreement shall ensure that a share of the proceeds from activities under the mechanism referred to in paragraph 4 of this Article is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.

7. The Conference of the Parties serving as the meeting of the Parties to this Agreement shall adopt rules, modalities and procedures for the mechanism referred to in paragraph 4 of this Article at its first session.

Decision 1/CP.21 (paras. 36-38)

III. Decisions to give effect to the Agreement

Mitigation (...)

- 36. Requests the Subsidiary Body for Scientific and Technological Advice to develop and recommend the guidance referred to under Article 6, paragraph 2, of the Agreement for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session, including guidance to ensure that double counting is avoided on the basis of a corresponding adjustment by Parties for both anthropogenic emissions by sources and removals by sinks covered by their nationally determined contributions under the Agreement;
- 37. Recommends that the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement adopt rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Agreement on the basis of:
 - (a) Voluntary participation authorized by each Party involved;
 - (b) Real, measurable, and long-term benefits related to the mitigation of climate change;
 - (c) Specific scopes of activities;
 - (d) Reductions in emissions that are additional to any that would otherwise occur;
 - (e) Verification and certification of emission reductions resulting from mitigation activities by designated operational entities;
 - (f) Experience gained with and lessons learned from existing mechanisms and approaches adopted under the Convention and its related legal instruments;
- 38. Requests the Subsidiary Body for Scientific and Technological Advice to develop and recommend rules, modalities and procedures for the mechanism referred to in paragraph 37 above for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement at its first session; (...)

Annex 2: Positions of Parties on Critical Issues under Negotiation

African Group of Negotiators (AGN)

Formed during COP1 in 1995, the African Group of Negotiators (AGN) is an alliance of African states comprised of 54 Parties that represents the interests of the region in the climate change negotiations. It is guided by decisions and key messages from the Committee of African Heads of State and Government on Climate Change (CAHOSCC), and the African Ministerial Conference on Environment and Natural Resources (AMCEN). From its earliest submissions, the AGN has sought to retain the flexibility of its membership to host mitigation projects in sectors outside the scope of NDCs without having to apply a corresponding adjustment when transferring mitigation outcomes internationally, while at the same time arguing for mandatory imposition of a share of proceeds (SOP) and overall mitigation in global emissions (OMGE) to cooperative approaches under Article 6.2 to ensure the attractiveness of the mechanism under Article 6.4 and secure greater adaptation finance flows. AGN has not expressed a clear position on transition of legacy units issued under the Kyoto Protocol, and on baselines and additionality.

Negotiating Issue	Position	Date
Accounting for Emission Reductions	Article 6.2 guidance is applicable to units generated under Article 6.4 if they are internationally transferred and used for compliance. Mitigation units must be reported as ITMOs by the host and the acquiring Party and a corresponding adjustment must take place in the accounting balance of both countries.	22 October 2017 ⁸⁰
Outside NDCs	However, there are also limits to the application of Article 6.2 guidance to units generated under Article 6.4 when transfers are out of scope of what Article 6.2 regulates (see Figure 1). ()	
	Another situation where Article 6.2 guidance is not applicable is when the mitigation outcome that is transferred is not reflected in the host country's NDC because the activity is out of scope of its NDC. In this situation there is no risk of double counting because the emission reduction would only be counted by the acquiring Party but not by the host Party in its NDC. A corresponding adjustment to prevent double counting is not needed. If it were required, it would place an undue burden on the sectors which are covered by the host country's NDC because these would have to make up for the shortfall.	
	The most common reason for countries not to include a sector in their NDC is the lack of quality data. This should not act as a deterrent to an instrument that could help unlock mitigation potential and thereby improve data in the sector. Mitigation activities incentivized through the SDM could help a country develop better knowledge and capacity in the sector, thereby laying the groundwork for the sector's inclusion in the NDC at the next NDC cycle. The capacity of the SDM to act as an enabler of progression must not be stifled by making its use unnecessarily difficult. ()	
	In summary, a distinction needs to be made between situations in which host countries only report on units generated and transacted under the SDM and those which also require corresponding adjustments to be made to the host country's accounting balance.	
Share of Proceeds (SOP)	[T]he AGN considers the following to be key drivers in the operationalization of market-based mechanism(s): () An equal treatment of the approaches of Articles 6.2 and 6.4 in terms of their contribution to () adaptation finance.	27 March 201781
	Share of Proceeds: Shall apply to both Articles 6.2 and 6.4 and fund adaptation and sustainable development for developing country Parties of the Paris Agreement.	
	As not to kill the mechanism for mitigation and sustainable development (Article 6.4 – SDM) a share of proceeds from similar activities in nature conducted under cooperative approaches (generation of mitigation outcomes) is used to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.	22 October 2017 ⁸²
	Article 6 paragraph 1 defines the purpose of international voluntary cooperation to allow for higher ambition in Parties' mitigation and adaptation actions. This chapeau extends to all market and non-market mechanisms of Article 6 and clarifies that cooperative approaches under Articles 6.2 and 6.3 are not exempt from contributing to adaptation finance. In operationalizing Article 6, Parties must not fall behind the principle and status quo already agreed in Decision 1/CMP.8 to extend the SOP to all UNFCCC/Kyoto protocol market-based mechanisms, including the clean development mechanism (CDM), joint implementation and international emission trading. According to this decision, the CMP decided that for the second commitment period, the Adaptation Fund shall be further augmented through a 2 per cent share of the proceeds levied on the first international transfers of AAUs and the issuance of ERUs for KP's Article 6 projects immediately upon the conversion to ERUs of AAUs or RMUs previously held by Parties (section V para 21). Implementation of the Paris Agreement must not be less ambitious with regard to adaptation finance than the decision 1/CMP.8. In keeping, at least, the same level of ambition, it is the firm view of the AGN that the use of all cooperative approaches shall deliver a contribution for adaptation.	14 April 2021 ⁸³

	There must also be a balanced treatment of international voluntary cooperation under the cooperative approaches (Article 6.2) and the Article 6.4 mechanism. For the Article 6.4 mechanism, a SOP for adaptation will be levied. Mitigation activities must not be treated differently in terms of their contribution to adaptation finance depending on whether they are implemented under Article 6.2 cooperative approaches or the Article 6.4 mechanism. This would otherwise lead to the evasion of the adaptation levy and undermine the functioning of the Article 6.4 mechanism. Putting the burden of an adaptation levy solely on those that do not have the capacity to set up their own cooperative approach but need to or prefer to rely on a centralized mechanism with UNFCCC oversight, would also lead to an unfair and unequitable allocation of the burden. A disproportionately large share of adaptation finance would then be leveraged from mitigation action taking place in poor countries with low capacities. () AGN Proposal for Article 6.2 The AGN is of the strong view that starting point for the negotiations should be Option A of Version 1 of the COP 25 Presidency draft decision from 13 December 11:45 hrs. This option is unequivocal about the mandatory nature of a contribution to adaptation finance applying to all cooperative approaches and the destination of adaptation finance being the Adaptation Fund. Option A furthermore spells out a clear approach for calculating the contribution to adaptation finance that ensures balanced treatment of international voluntary cooperation under Articles 6.2 and 6.4.	
	Some aspects of this option could be further discussed to see how it could be operationalised in relation to the various activities that will be carried out under the cooperative approaches of Article 6.2.	
Overall Mitigation in Global Emissions (OMGE)	[T]he AGN considers the following to be key drivers in the operationalization of market-based mechanism(s): () An equal treatment of the approaches of Articles 6.2 and 6.4 in terms of their contribution to overall mitigation () Overall Mitigation in Global Emissions Shall apply to both Articles 6.2 and 6.4; Important to operationalize overall mitigation in a transparent manner. Usage of the mechanism is supplementary to own efforts.	27 March 2017 ⁸⁴
	Noting that cooperative approaches shall ensure environmental integrity, it is imperative that they are scrutinized to result in an increase in ambition. Mitigation outcomes can only be traded under the condition that the cooperation has resulted in a greater level of mitigation than would have occurred in the absence of the cooperation. Furthermore, cooperative approaches must not lead to perverse incentives. This includes that activities carried out under cooperative approaches are held to the same rigorous standard (quality of approaches and accounting methodologies) as activities carried out under Article 6.4, if they are similar in nature.	22 October 2017 ⁸⁵
	Alliana and Constitutional Chatan (ACCIC)	

Alliance of Small Island States (AOSIS)

Established in 1990 ahead of the 2nd World Climate Conference, the Alliance of Small Island States (AOSIS) is an intergovernmental organization that represents the interests of 39 Small Island Developing States (SIDS) that are particularly vulnerable to climate change and its related effects on the ocean, including sea level rise, coastal erosion and saltwater intrusion.⁸⁶ On the critical issues under negotiation, AOSIS has forcefully advocated for the need to perform a corresponding adjustment for emission reductions generated outside the scope of a host country NDC and transferred internationally, as well as the need to deliver a share of proceeds (SOP) from ITMO transfers under Article 6.2. It has been more equivocal on the transition of legacy units issued under the Kyoto Protocol, the need to apply an overall mitigation of global emissions (OMGE) under Article 6.2, and baselines and additionality.

Negotiating Issue	Position	Date
Accounting for Emission Reductions Outside NDCs	 [T]he CMA will need to decide whether: (1) to only require a corresponding adjustment in the Acquiring Party's account; or (2) to require corresponding adjustments in both Acquiring Party and Host Party accounts. (Option 1) Only the Acquiring Party makes a corresponding adjustment. It could be argued that because only one Party will be using these Article 6.4 reductions towards achievement of its NDC, there is no risk of double counting the same reductions toward more than one NDC, and therefore no corresponding adjustment is needed in the Host Party. However, it could also be argued that this approach may create a perverse incentive for Host Parties to maintain sectors outside the scope of their NDCs, where they can be used to generate offsets that do not require corresponding adjustments. This might deter Parties from moving to economy-wide emission reduction or limitation targets, or from putting mitigation measures in place in certain sectors, to protect these sectors for external investment. (Option 2) Both Parties make corresponding adjustments. 	

	 It could be argued that this might encourage Parties to bring relevant sectors and activities within the scope of their future NDCs, where they can use conservative baselines to achieve benefits from these activities that they can use toward their own NDCs. Corresponding adjustments on both sides may make it easier for Host Parties without economy-wide targets to move to economy-wide NDCs over time, with a clearer record of any Article 6.4 transfers previously made. 	
	In AOSIS' view, the issuance of all Article 6.4 emission reduction units ('A6.4ERs') needs to be associated with a corresponding adjustment by the host Party to satisfy the requirements of Articles 6.1, 6.2, 6.3, 6.4, 6.5 and 6.6. Corresponding adjustments need to take place in connection with issuance of A6.4ERs and match the total volume of emission reductions credited for which issuance takes place, as indicated under the 3rd Iteration Text.	19 May 2021 ⁸⁸
	AOSIS has repeatedly expressed the view that Article 6 activities should be limited to those activities that are undertaken inside the scope of Parties' NDCs. This is needed to avoid creating a perverse incentive for Parties to maintain sectors outside the scope of their NDCs to avoid making corresponding adjustments, and to create an incentive for Parties to move toward economy-wide NDCs, as encouraged and agreed under Article 4.4, where Parties would therefore have the broadest opportunity to engage in Article 6.4 project activities.	
	The entire context of the Paris Agreement is NDC implementation. Articles 6.1, 6.2, 6.3, 6.4 and 6.5 contain explicit references to NDCs. Accordingly, it is consistent with Article 6 to limit project activities under Article 6.4 to those activities undertaken within the scope of host Party NDCs.	
	With a view to enabling compromise, AOSIS would be willing to consider allowing the inclusion of projects outside the scope of Parties' NDCs in Article 6.4, but only if:	
	 (1) corresponding adjustments are required for these project activities in the same manner as for all other Article 6.4 project activities, as described above; (2) the same level of contextual information is required for activities undertaken outside the scope of NDCs as is required for activities undertaken inside the scope of NDCs, to ensure the avoidance of overselling, ensure no hot air is created, ensure the avoidance of double counting, and avoid creating perverse incentives for Parties not to move towards economy-wide NDCs over time, contrary to the encouragement in Article 4.4 of the Paris Agreement. 	
	Corresponding adjustments are needed because Article 6.4(c) indicates that Article 6.4 units can be usable by another Party toward its NDC. This is only possible in a context where corresponding adjustments by host Parties have been made. Similarly, SOP and OMGE implementation under 6.6 and 6.4(d) require corresponding adjustments by host Parties to avoid double counting, double claiming or double use.	
	AOSIS notes that the possibility of a timeframe without corresponding adjustments for ITMOs from "outside" NDCs has been raised. This would be problematic in view of the Paris Agreement's requirement that Parties ensure robust accounting and ensure the avoidance of double counting. It would also be in conflict with implementation of SOP and OMGE – two core features of the Article 6.4 mechanism.	
Share of Proceeds	The () delivery of a share of proceeds for adaptation are features of the 6.4 mechanism, but they could also be features of cooperative approaches under Article 6.2, so that Article 6 as a whole contributes to the goals of the Paris Agreement, going beyond offsetting.	27 April 2017 ⁸⁹
	The goals of Article 6.4 should not be undermined through competition with Article 6.2 in the contexts of the share of proceeds (). Extension of a share of proceeds to Article 6.2 () can leverage greater momentum from Article 6 tools as a whole.	
	The delivery of a share of proceeds for adaptation is a feature of the 6.4 mechanism, but it could be a feature of all cooperative approaches under Article 6.2, to contribute to higher ambition in adaptation actions, as referenced under Article 6.1. The application of this Article 6.4 element to all transfers under Article 6.2 would avoid disadvantaging the role of Article 6.4 and would leverage the utility of Article 6.2 provisions. There is already experience in extending the share of proceeds under the CDM to Joint Implementation and International Emissions Trading under the Kyoto Protocol.	4 November 2017 ⁹⁰
	Provisions addressing accounting for the share of proceeds for adaptation. Provision active initial share of proceeds (AOSIS process 50).	
	 Provision setting initial share of proceeds (AOSIS proposes 5%) Provisions addressing accounting for any share of proceeds for administration. 	
	 Provision setting initial share of proceeds for administrative expenses (X%). 	
	[R] equirements under Article 6.2 should be as stringent, as those set out for Article 6.4, including with respect to SOP.	19 May 2021 ⁹¹
	The operation of a decentralized system under Article 6.2 cannot be permitted to undermine the core aims of Article 6.4, which include the delivery of SOP. If decentralized mitigation outcomes under Article 6.2 can be used toward NDCs, they will compete in the marketplace with 6.4 units and there is a risk that the benefits of Article 6.4 with respect to SOP would be undermined.	
	All Article 6 activities should contribute predictable adaptation financing to support the needs of particularly vulnerable developing country Parties as under Article 6.4, to the Adaptation Fund.	

	UNFCCC Parties that are Parties to the Kyoto Protocol already have experience in extending the share of proceeds under the Clean Development Mechanism ('CDM') to both Joint Implementation and International Emissions Trading – two other Kyoto mechanisms. That experience is analogous to the current situation and was accomplished by adoption of Decision 1/CMP.8 in connection with the Doha Amendment. Moreover, since adoption of the Paris Agreement, emissions have continued to increase, which makes it all the more essential that all tools under Article 6 be used to generate revenues to support vulnerable developing country Parties in meeting the costs of adaptation.	
Transition of Legacy Units	To protect environmental integrity, Parties may need to consider: () • Quantitative restrictions on carryover? • Restrictions on use of vintages of reductions?	4 November 2017 ⁹²
Overall Mitigation in Global Emissions	Article 6.2 does not expressly refer to an aim to deliver an overall mitigation in global emissions. However, Article 6.1 recognizes that some Parties choose to pursue voluntary cooperation in the implementation of their NDCs to allow for higher ambition in their mitigation actions. Use of the accounting system for ITMOs can be used to operationalize such a higher ambition. This can be done by cancelling a percentage share of ITMOs upon transfer or use. The goals of Article 6.4 should not be undermined through competition with Article 6.2 in the contexts of () the requirement under Article 6.4 that the	27 April 2017 ⁹³
	mechanism aim to deliver an overall mitigation in global emissions. Extension of () cancellation systems that deliver an overall mitigation in global emissions to Article 6.2 can leverage greater momentum from Article 6 tools as a whole.	
	The delivery of an overall mitigation in global emissions is a feature of the Article 6.4 mechanism, but it could also be a feature of all cooperative approaches under Article 6.2 to allow for higher ambition in mitigation actions, as referenced under Article 6.1.	4 November 2017 ⁹⁴
	Use of the accounting system for ITMOs can be used to operationalize this higher ambition, by cancelling a percentage share of ITMOs upon transfer or use so that Article 6 as a whole contributes to the goals of the Paris Agreement by going beyond offsetting. The application of this Article 6.4 element under Article 6.2 would avoid disadvantaging the role of Article 6.4 and would leverage the utility of Article 6.2 provisions.	
	• Provisions addressing accounting for an overall mitigation in global emissions (e.g., through cancellations)	
Baselines and	The following provision is needed in the rules, modalities and procedures:	
Additionality	• Provision allowing host Party to set more conservative baselines, to enable host Party to retain a greater share of the reductions achieved toward its current and future NDCs.	
	Augh Crown	

Arab Group

The Arab Group, whose membership comprises the 22 member states of the League of Arab States (LAS), represents the views of Arab states in the Middle East and North Africa. It has expressly opposed application of a corresponding adjustment to emission reductions generated outside the scope of a host country NDC under Article 6.4, and endorsed mandatory delivery of a share of proceeds (SOP) from ITMO transfers under Article 6.2. It has not expressed a clear position in its submissions on the transition of legacy units issued under the Kyoto Protocol, the need to ensure an overall mitigation of emissions (OMGE) under Article 6.2, or the question of baselines and additionality.

Negotiating Issue	Position	Date
Accounting for Emission Reductions Outside NDCs	 The Arab Group wishes to highlight the following principles that should be considered while developing the rules modalities and procedures for article 6.4: For the purpose of avoiding the use of emission reductions by more than one party, a host Party shall not be required to apply corresponding adjustments for transfers of A6.4ERs from the mechanism established by Article 6, paragraph 4, where the ITMOs are achieved from emission reductions and removals from policies and measures not covered by its NDC. Corresponding Adjustment shall not be applied for 6.4 emission reductions and removals from policies and measures that are additional. Corresponding Adjustment shall be applied only if A6.4ERsfrom policies and measures are included in the transferring party's NDCs. 	16 April 2021%
Share of Proceeds	Share of proceeds: Shall apply to both Articles 6.2 and 6.4 and fund adaptation and sustainable development for developing country Parties of the Paris Agreement. These shares of proceeds shall be allocated to the Adaptation Fund. () The share of proceeds associated with the Article 6.4 mechanism is intended to support administrative expenses and adaptation costs for vulnerable Parties. These proceeds should also be applied to the internationally transferred mitigation outcomes (ITMOs) in Article 6.2 where it would be equally relevant and effective. Extending the share of proceeds provision to Article 6.2 would also ensure that activities under Article 6.4 would not be unduly disadvantaged.	18 October 2017 ⁹⁷

2. The Ar	rab Group wishes to highlight the following points:	12 April 202198
to the imp	ng the Share of Proceeds under both Articles 6.2 and 6.4 of the Paris Agreement under the UNFCCC for the Adaptation Fund is necessary due bortance of the issue of adaptation for developing country Parties, as adaptation efforts are severely underfunded compared to mitigation efforts. it is critical to mobilize a stable source to increase adaptation finance. ()	
	6.1 of the Paris Agreement clearly recognizes Parties choice in allowing for higher ambition in their mitigation and adaptation actions and to promote le development and environmental integrity, hence, adaptation is an integral and key part in the approach of Article 6, and must not be excluded cle 6.2.	
that will sa	treatment of the Share of Proceeds under both Article 6.2 and 6.4 of the Paris Agreement creates a stable sources of long-term adaptation finance support the purpose of Paris Agreement to strengthen the global response to the threat of climate change. This will also avoid disadvantaging the 4 mechanism by avoiding incentives to bypass the global mechanism altogether and limit voluntary cooperation to the cooperative approaches under 2.	
3. In light	t of that, the Arab group would like to share the following proposal:	
to the adve percentage	are of Proceeds under Articles 6.2 and 6.4 are to cover administrative expenses and assist developing country Parties that are particularly vulnerable erse effects of climate change to meet the costs of adaptation measures. The Share of Proceeds shall be levied as a mix of monetary fees as well as a of credits to have a balance between stable income and the option to benefit from higher market prices, to maximize funds to the adaptation fund, we should be an equal treatment of the Share of Proceeds under Article 6.2 cooperative approaches and under Article 6.4 mechanism.	
	Article 6.2, the monetary fees can be applied on annually transferred net amounts of ITMOs and charged to the acquiring Party. This approach is to any type of cooperative approach and would accommodate the use of multiple metrics when reporting ITMOs. ()	
d) While t	the 2 percentage of credits under both Article 6.2 and 6.4 can be applied as follows:	
i. Under A	Article 6.2 the 2 percentage of Article 6.2 ITMOs shall be levied at the transfer and charged to the acquiring party.	
·	P 9	

Brazil

Brazil has played an influential role in the negotiations on Article 6, with its uncompromising view on the need to allow full transition of legacy units issued under the Kyoto Protocol resulting in one of the main barriers to agreement on operational details for Article 6 at COP25. Its view on the need to perform a corresponding adjustment for emission reductions outside the scope of a host country NDC seems to have evolved, with initial opposition to any such need giving way, in the latest submission of April 2021, to acknowledgment of the possibility of a transition period after which a corresponding adjustment would become mandatory. It has not indicated clear views on the need to deliver a share of proceeds (SOP) and to apply an overall mitigation of global emissions (OMGE) under Article 6.2.

Negotiating Issue	Position	Date
Accounting for Emission Reductions Outside NDCs	9. During discussions at SBSTA 46, some Parties implied that corresponding adjustments should take place at the very initial transfer from the SDM registry to a national account. There are legal, technical and environmental considerations to dispute this idea. 10. From a legal perspective, in accordance with Decision 1/CP.21 and with Article 6 of the Paris Agreement, the corresponding adjustment to avoid double counting is restricted only to the guidance referred to in Article 6.2. It does not apply to the rules, modalities and procedures for the mechanism established by Article 6.4. It is equally important to consider that, in accordance with Article 6.4(c), one of the aims of the SDM is "to contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used by another Party to fulfill its nationally determined contribution". The application of a corresponding adjustment in the context of Article 6.4 would, therefore, infringe the legal text of the Paris Agreement. 11. From a technical perspective, given that CERs issued by the SDM Executive Board would sit in the SDM registry (and not in a national account), it is illogical to conceive units to be subtracted from the national account of the host country, when the host country itself has not taken part in such first transaction. It must be noted that the availability of CERs in the SDM registry will be fundamental to ensuring the SDM is fully accessible to non-State stakeholders, while preserving their prerogative to purchase multilaterally certified units for purposes other than the demonstration of achievement of NDCs. Moreover, if a host Party of SDM mitigation activities was to have units subtracted from its national account by means of a corresponding adjustment, such Party's ability to demonstrate achievement of its NDC would be significantly impaired. This would disincentive Parties from approving SDM mitigation activities in their territory, thus underm	9 October 2017 ⁹⁹

- 12. Finally, from an environmental perspective, environmental integrity concerns related to "double counting" do not apply to the dynamic of the 6.4 mechanism. This is because Article 6.5 prevents "double counting" by not allowing SDM CERs to be used by the host country if used by another Party to demonstrate achievement of its own NDC.
- 13. Some have suggested that, even with the safeguard under Article 6.5 there would be a risk of "double claiming" of a single mitigation outcome resulting from a CER: the CER as a unit could be claimed by the acquiring Party to account for its NDC; at the same time, the host Party would be able to retain related mitigation benefits in its national inventory. Brazil strongly disputes such a suggestion. Similarly to the CDM, SDM mitigation activities will not automatically affect the calculation of emission levels in national inventories in national inventories. The calculation of emission levels in national inventories follows IPCC Guidelines for National Greenhouse Gas Inventories. It entails a factual estimate, reflecting emissions that actually happened. The amount of CERs generated by a SDM/CDM mitigation activity, on the other hand, is to be determined by the application, at the project level, of a baseline and monitoring methodology approved by the Executive Board. It is a counterfactual estimate, reflecting hypothetical emissions that never came to happen in the first place. In accordance with the IPCC Guidelines, in the energy sector, for example, which is traditionally the main source of greenhouse gas emissions, the estimation of emissions requires in most cases the use of an average emission factor for a source category and fuel combination throughout the source category. In contrast, also as an illustration, CDM methodological tools determine the CO₂ emission factor of electricity generated by power plants in an electricity system, by calculating the "combined margin" emission factor of the electricity system (grid).
- 14. Consequently, there is not a correspondence in the calculation of CERs issued and of national inventories emissions that would justify "corresponding adjustments" to take place. Instead of a risk of double claiming mitigation outcomes, "corresponding adjustments" in the context of Article 6.4 would entail a risk of "double counting" of emissions, in detriment to the host country. This, again, would disincentive Parties from approving SDM mitigation activities in their territory, thus undermining the mechanism's potential to deliver real, measurable, and long-term benefits related to additional emission reductions.
- 13. These complexities are further aggravated by countries' different national circumstances and technical capacities. Brazil understands that it will take time until the relationship between accounting for projects emissions reductions and removals and for national GHG inventories is clearly known and for countries to fully develop national accounting systems that are able to capture the effects of emissions reductions and removals at the disaggregated level of individual activities.

1 April 2021¹⁰⁰

Moreover, countries committed to presenting their intended nationally determined contributions long before discussions related to Article 6 were in sight. Therefore, Brazil is in favor of the introduction of a transition period, in which corresponding adjustments are to be applied only to first transfers of A6.4ERs that are covered by host countries' NDCs. This initial transition period would serve for countries to build the capacities that are needed for them to gradually adapt and incorporate more sophisticated accounting methods that will be required for them to effectively and accurately account for activities. (...)

- 16. Should the information to be provided by host countries in the assessment of projects confirm that a 6.4 activity whose emissions reductions and removals are covered by their NDCs, a corresponding adjustment is to be applied for all A6.4ERs first transferred, consistent with the guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement. However, if it is confirmed that a 6.4 activity will result in emissions reductions or removals not covered by a host country's NDC and thus not entail double counting-, no corresponding adjustment would be required. This rule is to be evenly applied to all Parties willing to host Article 6.4 activities throughout the transition period. After the expiration of this interval, all first transfers of A6.4ERs, covered and not covered by host countries' NDCs, are to be correspondingly adjusted.
- 17. Brazil understands that a time-bound solution is meritorious in this case for providing a pathway for a common set of rules to be developed and equally applied to all Parties, both during and after the transition period to be introduced. This, in turn, would avoid perverse incentives for the creation of parallel system and discrimination within the mechanism by having rules that would apply for some Parties (that "opt-in"), but not others (that "opt-out"). It also gives reassurance that a full application of corresponding adjustments for emissions reductions and removals covered and not covered by host countries' NDCs will eventually occur and be the basis for a more permanent set of regulations of the mechanism. (...)
- 19. Finally, Brazil expects that the length of the transition period discussed in this section is agreed in COP-26. In order to contribute positively to the discussions on this matter, Brazil suggests that the duration of the transition period is chosen in a way that does not hinder the implementation of NDCs within the timeframes specified by Parties. It is also desirable that, when discussing and choosing the length of the transition period, Parties take into account the challenges associated with the capacity building activities suggested in the previous paragraphs, so as to make this time span consistent with the efforts to be undertaken.

18. The ability of the climate change regime to ensure continuity and a smooth transition from the CDM to the SDM will be key to the reputation of the Convention, particularly among private sector stakeholders. Failure to guarantee stakeholders, especially CDM project developers, that their efforts will be

31 March 2017¹⁰¹

Transition of Legacy Units	recognized and tangible in the context of the new Paris Agreement will jeopardize legal certainty and prevent CERs to fully contribute to early-action and to enhancing pre-2020 ambition.	
Cints	19. For Brazil, smooth transition from the CDM to the SDM entails assurance by Parties on three key elements: (i) the use of existing CDM methodologies and accreditation system under 6.4; (ii) the continuation of registered CDM project activities issuance under the SDM; and (iii) eligibility of existing CDM CERs.	
	22. Clarity on the continuation of registered CDM project activities issuance under the SDM and on eligibility of existing CERs towards Article 6 of the Paris Agreement could address demand issues and provide for a new price signal for CERs, which would, in turn, spur new project activities (representing additional mitigation benefits) and new financial resources for the Adaptation Fund. This would be particularly important for enabling early-action until the SDM is fully operational. A price signal from clarity on CERs eligibility would come, on the one hand, from demand from Parties. On the other, from enhanced demand by non-State actors, which would see in the CDM increased advantages related to legal certainty and to the United Nations environmental integrity "stamp".	
	3. The ability of the climate change regime to ensure a smooth transition from the CDM to the SDM will be key to the reputation of the Convention and to secure continued engagement of the private sector in mitigation action. Failure to guarantee stakeholders, especially CDM project developers, that their efforts will be recognized and tangible in the context of the new Paris Agreement would jeopardize legal certainty and prevent CERs from fully contributing to early-action and to enhancing ambition in all sectors. ()	9 October 2017 ¹⁰²
Baselines and Additionality	31. The SDM must reward certified emission reductions that are additional to any that would otherwise occur in a business-as-usual scenario. Business-as-usual' in this context does not refer to a scenario in which no efforts are undertaken domestically. In the context of article 6.4 of the Paris Agreement, a business-as-usual scenario is that in which Parties are expected to implement their NDCs and associated national policies.	31 March 2017 ¹⁰³
	32. In accordance with criteria under the CDM, also applicable to the SDM, additionality can be assessed through demonstration that the mitigation activity is the first-of-its-kind or through analysis on investment, barriers and common practice, showing that less costly alternatives would not present equal climate benefits. Mandatory regulations also interfere with additionality: if a proposed activity is the only alternative that is in compliance with mandatory regulations, it cannot be considered additional.	
	33. Requiring activities to be additional is, therefore, fundamental for supporting climate-friendly technologies or practices that are promising but still not financially viable or widespread. Through additionality assessments, the SDM will be able to support new technologies and innovations, until they gain sufficient scale to allow them to be deployed in a competitive basis. After a technology or innovation becomes economically competitive or common practice, it will no longer be additional. Rather, it will reach a stage in which its associated mitigation benefits do not depend on the 6.4 mechanism to occur. Assuming that existing CDM methodologies and accreditation system will continue to be in force under the SDM, new SDM project activities that have been considered to be additional up to 2017 may not pass the additionality test after 2020, when technologies formerly needing incentives might become attractive irrespective of their environmental benefits.	
	5. The proper operationalization of the concept of 'additionality', as mandated in paragraph 37(d) of Decision 1/CP.21, is central to the aims of the SDM and to its potential to enhance climate ambition. 'Additionality' should award projects that would not have been possible in the absence of the 6.4 mechanism. With the progressive implementation of the Paris Agreement and of policies undertaken in the context of Party's NDCs, it should be expected that activities that were once deemed additional might no more be able to demonstrate that they are first-of-its-kind or that they pass the investment, barriers and common practice analysis. Brazil believes that current CDM methodologies, being also applicable to the SDM, will ensure that additionality continues to be properly assessed.	9 October 2017 ¹⁰⁴
	Environmental Integrity Group (EIG)	

Formed in 2000, the Environmental Integrity Group (EIG) represents the views of Mexico, Liechtenstein, Monaco, the Republic of Korea, Switzerland and Georgia in the climate negotiations. 105 It has consistently supported the need to apply a corresponding adjustment when transferring emission reductions generated outside the scope of a host country NDC, but has advocated for a flexible – meaning a voluntary – solution on the delivery of a share of proceeds from cooperative activities under Article 6.2. On the application of overall mitigation of global emissions (OMGE), transition of legacy units issued under the Kyoto Protocol, and baselines and additionality it has been silent or less clear in its submissions.

Negotiating Issue	Position	Date
-------------------	----------	------

Accounting for Emission Reductions Outside NDCs	Such additions and subtractions have to be carried out both in the case of ITMOs resulting from an activity within the scope of the NDC and outside of its scope. This is to avoid that there is a perverse incentive for countries not to extend the scope of their NDC in order to carry out Art. 6 activities outside of the scope of the NDC. The host Party will therefore have an incentive to extend the scope of its NDC (as per the direction of travel indicated in Art. 4.4) and keep part of the emission reductions (resulting from long-term or transformational emission reduction activities) for itself to meet its subsequent NDCs () For such use of Art. 6.4, some requirements should be set so that the long-term rationale of this use does not undermine the ambition of the NDC of the Party. Indeed, use of Art. 6.4 as a "domestic offset scheme" for emission reductions outside of the scope of the NDC should play the transitional function of discovering further emission reduction potentials and fostering the inclusion of sectors/gases in future NDCs.	30 October 2017 ¹⁰⁶
	1. Background and basic approach	15 April 2021 ¹⁰⁷
	The EIG is not opposed to the development of Article 6 activities outside the host Party's NDC altogether. Article 6 activities or climate finance support for sectors outside the NDC scope may present opportunities to better understand previously under-analysed sectors and allow for those sectors to be included in the next NDC of the host Party, thereby contributing to the ambition-raising principle enshrined in Article 4.3 of the Paris Agreement. ()	
	For the EIG, accounting through corresponding adjustments must be equally applied for ITMOs generated and transferred from inside and outside the scope of the NDC given:	
	 The practical difficulty of clearly differentiating between inside and outside the NDC scope; The need for long-term incentive alignment for the submission of more ambitious NDCs with enhanced scope over time. () 	
	3. Accounting needed outside NDC scope	
	Many NDCs do not provide enough information to infer whether a proposed activity is in fact inside or outside the NDCs' scope. This could lead to confusion and arbitrary arguments in favour or against declaring a certain activity to fall inside or outside the NDC scope, particularly when such a classification has accounting implications.	
	Private sector actors and final users of the ITMOs generated will benefit from the transparency and coherence of a single accounting system. Secondly, if rules on accounting gave preferential accounting treatment to activities in sectors outside the NDC scope, it would bear the risk of misaligned incentives in view of the need for progression of NDCs over time. Such rules could encourage Parties to leave certain sectors or gases outside their future NDC updates in order to receive more investments and sell emission reductions without any need for corresponding adjustments. The potential incentives that would come with such rules would be in conflict with Article 4.3 of the Paris Agreement.	
	4. Conclusion	
	The EIG strongly believes in the necessity of a coherent system of accounting both under Article 6.2 and under Article 6.4 as well. A coherent and equal set of accounting rules is necessary both inside and outside the scope of the NDC given:	
	 The practical difficulty of clearly differentiating between inside and outside the NDC scope. The need for long-term incentive alignment for the submission of more ambitious NDCs with enhanced scope over time. 	
	Activities outside the scope of the NDC can occur, be it through Article 6 or climate finance support as they provide additional emission reductions and great learning potentials for the future inclusion of a sector in a Party's NDC update.	
Share of Proceeds	1. Background	15 April 2021 ¹⁰⁸
	The EIG is of the view that we should reach a concise and practical solution to the issue of adaptation financing, providing a clear rule under Article 6.4 and exploring flexible options under Article 6.2, that incentivize ambition and synergies between mitigation and adaptation. ()	
	2. Legal mandates in the Paris Agreement and their implications	
	• Article 6.1 does not use the verb "shall" but the verb "allow". Without specific references to how the higher ambition is to be achieved, contributions could take many different shapes, including but not limited to financial contributions to the Adaptation Fund. The specific reference of "their mitigation and adaptation actions", demonstrates that Article 6.1 foresees the possibility of higher ambition in both areas being integrated directly into the voluntary cooperation involving the engaged Parties acting as partners.	
	3. Differences between Article 6.4 and Article 6.2	
	() Article 6.2 has a different nature, which is bottom-up, and provides a framework for concrete cooperation between specific partners who have to fully bear the transaction costs of their cooperation, allowing for a variety of cooperation that may not necessarily involve the issuance of standardized units. In light of this, a share of proceeds would be harder to implement than under Article 6.4.	

European Union (EU)		
	• ensure that emission reductions originating from the activities are additional to any that would otherwise occur, by defining principles and rules for assessing additionality and periodically reassessing additionality of activities. In case an activity is not additional anymore, in particular when a NDC is revised or a new NDC is communicated, crediting has to stop ().	
	The body, when developing tools and standards for additionality, permanence, baselines, monitoring, reporting, verification, among others, in order to ensure that the activities are environmentally integer, has to:	
	conservative baselines set well below conservative estimates of current efforts and account for all policies (local, regional, national) in the baselines and that they meet stringent transparency criteria in line with the criteria applying to activities under Art. 6.4 () Aspects of activities	
	 for ITMOs originating from a cap-and-trade system in a Party (which may be States or regional economic integration organizations according to Art. 20) that are accounted for by another Party towards its NDC, demonstrate that emission caps in the cap-and-trade system are set well below BAU and that such systems have in place stringent transparency principles for the emissions covered by the system and include robust compliance measures at the national level; for ITMOs originating from activities or sectors not covered by a cap-and-trade system, demonstrate that activities have 	
	Ensuring environmental integrity Participating Parties, when ensuring environmental integrity of their cooperation under Art. 6, have to, in their biennial reports under the transparency framework () demonstrate that ITMOs result from mitigation activities that effectively occurred and where the reference to calculate emission reductions is set well below BAU of the specific sector. Best practices should be identified through dialogue in order to identify and promote best technical approaches;	30 October 2017 ¹¹¹
Baselines and Additionality	 Assurance of additionality: Objective tools for assessing additionality shall be developed by the body responsible for the supervision of the mechanism. Additionality of activities shall be periodically reassessed. In case an activity is not additional any more, crediting shall stop. Activity types with high risk of non-additionality shall be excluded. 	21 March 2017 ¹¹⁰
Transition of Legacy Units	It is important that current efforts to reduce emissions with CDM projects are further encouraged (continuation of vulnerable CDM projects that would stop without the revenues of the CDM and development of new projects) in order to achieve more emission reductions as soon as possible and to keep capabilities and competences in this field.	21 March 2017 ¹⁰⁹
	 Contribution could also be focused on specific adaptation activities in the cooperating countries, ranging from including adaptation components directly into the mitigation activities taking place under the cooperation to other measures helping to increase the ambition in adaptation. The EIG believes that we have to listen carefully to different countries positions on this matter, there is no one-size-fits-all approach under Article 6.2 as there is under Article 6.4. It will be participating Parties that will have to determine in a bottom-up manner which approach works best in their specific context. 4. Conclusion Article 6.2 is a more bottom-up vehicle and requires tailored solutions. Cooperative approaches should allow for higher ambition both in mitigation and adaptation actions; Parties that plan to engage under Article 6.2 should be transparent on how they would plan to respond to Article 6.1 in the specific context of their cooperation, including through contributions to the Adaptation Fund or specific actions on adaptation agreed between the cooperating Parties. 	
	However, Parties are encouraged to integrate in their respective cooperation under Article 6.2 suitable elements to increase adaptation ambition, which could be achieved by making contributions to adaptation actions and adaptation finance. • Contributions could range from voluntary government contributions to the Adaptation Fund (as one EIG member has done in the past) to countries charging fees for registering activities in the context of Article 6.2.	

Tracing its origins back to 1951, the European Union (EU) is a regional economic integration organization that is itself a Party to the UNFCCC and Paris Agreement, and represents the interests of the EU and its 27 Member States through the Party that holds the rotating EU Presidency. 112 Its reputation for championing climate ambition is also reflected in its positions on the critical negotiating issues impeding agreement on operational details for Article 6, where it has consistently cautioned against crediting of activities outside the scope of host country NDCs, and has only recently expressed a hesitant acknowledgment in written submissions of the possibility to credit such activities if a corresponding adjustment is performed. Likewise, it has signaled clear opposition to a transition of legacy units issued under the Kyoto Protocol, and advocated further research and analysis on the impacts of such a transition before reaching any decisions. On the question of a mandatory share of proceeds (SOP) levied from ITMO transfers under Article 6.2, the EU has expressed support for flexibility and a voluntary solution, but indicated openness to further discussion. On the other negotiating issues surveyed in thus document, finally, it has been silent or less clear in its written submissions.

Negotiating Issue	Position	Date
Accounting for	Its operationalisation must create incentives to broaden, quantify and account for NDCs. It must also avoid (perverse) incentives to increase emissions.	21 March 2017 ¹¹³
Emission Reductions Outside NDCs	We propose that only activities inside the scope of the NDC should be credited, noting that parties can update their NDC at any time.	6 October 2017 ¹¹⁴
Outside NDCs	3. Corresponding adjustments for emissions reductions outside the scope of an NDC	12 April 2021 ¹¹⁵
	In our view, cooperative approaches under Article 6 are confined to those sectors and gases that are covered by the scope of the NDC of the host Party, as Article 6.1 clearly provides that it is intended to help Parties pursue the implementation of their NDCs. Article 6 thereby provides an incentive for a Party wishing to include additional sectors and gases to update the scope of its NDC at any time, and to move over time towards economy-wide emissions reduction targets as called for in Article 4.4.	
	We have indicated in the course of the negotiations that, should Article 6 be extended to allow for transfers of mitigation outcomes achieved outside the scope of a Party's NDC, these transfers would need to be properly accounted for through the application of corresponding adjustments by the host Party.	
	Robust accounting is essential whenever Article 6 is used, to avoid double counting, but also to avoid disincentives for progression in terms of ambition and coverage of NDCs. Use of Article 6 outside the scope of an NDC raises additional issues such as how to address the non-permanence risk in the land sector, where we consider further appropriate measures may be needed to compensate for emissions on potential reversal.	
	4. The need to clarify proposals from Madrid	
	We note that in the final hours of Madrid, the COP Presidency proposed compromises on several issues on which there was insufficient time for a full consideration by Parties. ()	
	In our view, had this proposal been adopted in Madrid, it would have represented a clear departure from the Paris Agreement requirements to ensure environmental integrity and ensure robust accounting. As already stated, application of corresponding adjustment outside scope does not provide a full answer to some of the issues raised under point 3 of this submission. Furthermore, the scope and terms of the proposed potential opt out are unclear, and this makes an assessment of the risks such a proposal would pose very difficult.	
	5. The need for Article 6 to raise ambition rather than undermine ambition	
	To conclude, we remain convinced that the use of Article 6 should contribute to the raising of ambition rather than undermining it. Not applying corresponding adjustments for emission reductions outside the scope of an NDC could lead to an inflation rather than a reduction in emissions, and potentially to levels of issuance and use of credits that will make progression in terms of the coverage of NDCs more difficult.	
Share of Proceeds	2. Voluntary cooperation under Article 6 should allow for higher ambition in adaptation actions. ()	13 April 2021 ¹¹⁶
	a. The Paris Agreement does not provide a mandate for applying share of proceeds in respect of cooperative approaches under Article 6.2 – thus, as we have previously indicated, we do not see potential for agreement around the mechanical application of a similar approach to that agreed for Article 6.4 to 6.2.	
	We note that in the final hours of Madrid, the COP25 Presidency proposed compromises on several issues where there was insufficient time for a full consideration by Parties. ()	
	We have signaled a willingness to work on the basis of the COP25 Presidency's proposal. We welcome in particular its voluntary nature and note the encouragement to commit to contribute resources to adaptation. We are also interested in helping to clarify how this could be operationalized.	
Transition of Legacy Units	With the mechanism under Article 6.4 established, we underline that the mechanisms defined under the Kyoto Protocol shall not continue after the second commitment period. Substantive discussion of transitional arrangements for ongoing mitigation activities under these mechanisms should only occur on the basis of agreement on the core elements of the implementing rules under Articles 6.4 (noting that additionality and environmental integrity will form part of these core elements).	21 March 2017 ¹¹⁷
	With the mechanism under Article 6(4) established, we underline that the mechanisms defined under the Kyoto Protocol shall not continue after the second commitment period. The Paris Agreement makes no provision for transition from the Kyoto Protocol.	6 October 2017 ¹¹⁸

	We see risks in proposals that undermine, reduce or defer mitigation through carrying forward historic surpluses, or that lead to double counting of efforts. () If Parties were allowed to carry over CERs for use towards their NDC, or for other purposes, this could only be agreed in the context of other rules that ensure environmental integrity, and that preserve and enhance ambition in a number of other areas. These areas are well known, and include, the robust and comprehensive application of GHG accounting, and elements that secure the ambition of the new mechanism, identified in previous EU submissions.	16 June 2021 ¹¹⁹
	Several proposals on "transition" for CDM activities are in effect proposals for the continuing application of elements of the Kyoto Protocol in the Paris Agreement, or the deferral of the application of Paris Agreement requirements, and do not address the framing and implementation, still less the transition, to new rules and higher ambition.	
	More specifically, before any proposal can be considered it will be essential that all Parties are able to make a transparent assessment of the likelihood and quantum of risk associated with each proposals and related options on the table. To facilitate discussion, and without prejudging a decision, we would request that the secretariat prepares a background paper assessing the implications of a carry-over of units based on the proposals of the recent Presidency text of	
Baselines and Additionality	Elements of the rules, modalities and procedures which will require approaches that are significantly different in the context of the Paris Agreement (and which could also serve as headings for different sections in the rules, modalities and procedures) include particularly:	21 March 2017 ¹²⁰
	- rules on baseline approaches - to align crediting approaches and levels with short and long term mitigation objectives, - demonstrating the additionality of the reductions, in the context of meeting and/or enhancing the ambition of a given NDC ().	
	The baseline approaches should be based on ambitious benchmarks reflecting best available technologies (BAT) and enable the host Party to contribute to its mitigation objectives while also allowing the emission reduction credited to be used by another Party to fulfil its NDC (Article 6(4)(c)) (). The promotion of mitigation requires that individual and collective ambition, as reflected in current NDCs and incentives to extend and increase the ambition of NDCs, are not undermined. The baseline approaches derived by default from historic or projected emissions could undermine a host Party ability to meet its own NDC, by generating an expectation of crediting levels inconsistent with that Party NDC and overall mitigation strategy.	6 October 2017 ¹²¹
	Provision for automatically updated or dynamic baselines could contribute to ensuring progression and ambition and continuing benefits for the host Party. The additionality and baselines approaches will need to be re-assessed in accordance with Article 6 requirements, and updated in light of the host Party's NDCs. National priorities may have changed and assessments based on BAU projections or historical emissions may be inconsistent with, or even undermine, a host Party ability to meet its NDC.	

Independent Association of Latin America and the Caribbean (AILAC)

Created in 2012 during COP18, the Independent Association of Latin America and the Caribbean (Asociación Independiente de Latinoamérica y el Caribe, or AILAC) is a formal negotiating group of eight states from Latin America and the Caribbean that coordinate positions and represent shared interests during the international climate negotiations. ¹²² In its written submissions on Article 6 of the Paris Agreement, it has indicated clear views on the need to apply a corresponding adjustment to any emission reductions transferred internationally from outside the scope of a host country NDC, and opposes a transition period during which such a requirement would be waived. Its submissions express support for further exploration of delivery of a share of proceeds (SOP) and overall mitigation of global emissions (OMGE) to ITMO transfers under Article 6.2, but indicate no view on the transition of legacy units issued under the Kyoto Protocol.

Negotiating Issue	Position	Date
Accounting for Emission Reductions Outside NDCs	D. Scope and applicability of the RMP for the mechanism 27. In order to define the scope and applicability of the RMPs for the mechanism under Article 6.4 Parties should take into account, inter alia, some issues such as: d) AILAC is open to the possibility of including activities from outside the scope of the host country NDC in the scope of Article 6.4 as long as sufficient mechanisms to ensure robust accounting (including corresponding adjustments), environmental integrity and increasing ambition (including a move toward economy-wide NDCs for all Parties) can be established.	
	5. In this context, it is imperative to avoid all forms of double counting in accordance with the mandates given by the Articles 6.2 and 6.5 of the Paris Agreement. In addition, Decision 1/CP.21, paragraph 36 reinforces the need of using the corresponding adjustment as the most important tool to avoid double counting. In consequence, from AILAC's view, corresponding adjustments must be applied to ALL ITMOs and their underlying reductions used towards the achievement of the NDC or for any international mitigation purpose regardless of where they come from (i.e. inside or outside the NDC). This includes	27 May 2021 ¹²⁴

	the mitigation outcomes from the Article 6.4 mechanism that, once are internationally transferred, become an ITMO, and therefore, are subject to a corresponding adjustment. ()	
	8. Having clarified that, ensuring a consistent accounting approach across the article 6 also means that it is imperative to apply corresponding adjustments to all the 6.4 mitigation outcomes, even if they come from sectors and gases that are out of the scope of a Party's NDC. Allowing Parties with low capacity to implement activities outside the scope of their NDCs could help them to catalyse action and build capacity on mitigation but, at the same time, it is necessary that those Parties apply robust accounting rules to avoid perverse incentive to NDCs progression.	
	Specific suggestions on negotiating text 9. In line with the arguments provided above, AILAC favours the language included in paragraph 70 of the third version of the text drafted by the COP 25 Presidency in Madrid as follows: "A host Party shall apply a corresponding adjustment for all A6.4ERs first transferred consistent with decision X/CMA.2 (Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement)." In line with this, in AILAC's view a transition period for the application of corresponding adjustments would not be consistent with the imperative of having robust and coherent accounting requirements under Article 6.4.	
Share of Proceeds	K. Share of proceeds	26 October 2017 ¹²⁵
	21. Although the Paris Agreement only has the mandate to consider a share of proceeds for the mechanism under Article 6.4, AILAC is open to discuss about conditions under which a similar instrument could be applied for cooperative approaches under 6.2.	
	7. AILAC is looking forward for the replenishment of the Adaptation Fund once the Article 6.4 mechanism is up and running but we are also interested in collectively defining how Article 6 as a whole can play a role towards closing the adaptation finance gap and enhancing the Adaptation Fund in becoming a central entity to foster adaptation action throughout the developing world. In consequence, for AILAC it is essential to continue exploring concrete options to materialize adaptation financing through cooperative approaches under Article 6.2. With this, not only the contribution of article 6 to adaptation financing could be strengthened, but there would also be a more balanced approach between instruments derived from this article.	27 May 2021 ¹²⁶
Overall Mitigation in Global Emissions	H. Overall mitigation on global emissions 31. For AILAC it will be crucial to define a procedure to ensure that transfer and use of mitigation outcomes from article 6.4 towards achievement of NDCs contributes to overall mitigation. In addition, AILAC is open to discuss about the possibility of adapting this concept to the implementation of cooperative approaches under 6.2.	26 October 2017 ¹²⁷
Baselines and Additionality	E. Aspects of Activity 28. Some elements such as, inter alia, could be included in this section: a) Baselines estimation: methodologies should be designed not only for projects but also for other type and scale of activities such as policies, sectoral approaches, programme of activities, among others. Baseline methodologies should seek to be as robust as possible, including the use of counterfactual baselines, and the use of conservative approaches to guarantee environmental integrity and overall mitigation. () e) Additionality	26 October 2017 ¹²⁸
	т	

Japan

Japan has been notable in the Article 6 negotiations for its experience from deployment of the Joint Crediting Mechanism (JCM), a framework for bilateral cooperation on crediting of emission reductions. Its interest in continued use of international transfers finds its reflection in the negotiating position evident from its written submissions, where it endorses flexibility for participants in voluntary cooperation under Article 6, yet at the same time supports environmental integrity. Japan has, for instance, consistently called for performance of a corresponding adjustment when crediting emission reductions under Article 6.4 that occur outside the scope of a host country NDC, yet at the same time opposes mandatory delivery of a share of proceeds (SOP) from ITMO transfers under Article 6.2. Its written submissions do not show a clear position on transition of legacy units issued under the Kyoto Protocol and the need for overall mitigation of global emissions under Article 6.2.

Negotiating Issue	Position	Date
	Article 6.2	2 October 2017 ¹²⁹
	Accounting of credits/units not covered by NDC	

Accounting for Emission Reductions Outside NDCs	According to the Article 4, paragraph 4 of the Paris Agreement, Parties are encouraged to move over time towards economy-wide emission reduction or limitation targets. Therefore, it is important that guidance should ensure incentives for Parties to increase the coverage of sectors under its NDC. When an originating Party transfers credits/units generated from sectors outside (and inside) its NDC coverage, that Party should add the amount of credits/units transferred to its own emissions or deduct it from its own removals. This arrangement will secure avoidance of double claiming while also securing opportunities to implement emission reduction projects regardless of whether the sectors are covered under NDCs and ensuring Parties' incentives to cover more sectors in their NDCs as stipulated in the Paris Agreement. ()	
	Article 6.4 In order to avoid double counting, credit generated from the 6.4 mechanism should be subject to corresponding adjustment in line with the guidance of Article 6, paragraph 2. The credits/units need to be recorded in the registry for the 6.4 mechanism. The 6.4 mechanism registry should be established as a new and cost effective system, which does not require to link with existing national registry nor the international transaction log (ITL) system.	2 October 2017 ¹³⁰
	Under the Paris Agreement, avoiding double counting for ensuring environmental integrity is crucial to contribute to global emissions reductions. For this purpose, as a core principle, corresponding adjustments should be applied for all emissions reductions including Article 6.4 emission reductions (A 6.4 ERs), generated from either inside or outside of a Party's NDC, when the reductions are internationally transferred and used towards other Parties' NDCs or other international mitigation purposes. () On the contrary, A6.4ERs which are not authorized by the host Party to be ITMOs cannot be used towards other Parties' NDCs or other international mitigation purposes, therefore, corresponding adjustments may not be applied. () Japan is of the view that the option of not applying corresponding adjustments in relation to A6.4ERs generated from outside of a host Party's NDC for a certain period of time, when the reductions are used towards other Parties' NDCs or other international mitigation purposes, should be carefully considered from the perspective of ensuring environmental integrity and contributing to global emissions reductions. Japan has come to take this view in the light of the following factors:	1 May 2021 ¹³¹
	 When all sectors and greenhouse gases (GHGs) are covered by a Party's NDC, all A64ERs are supposed to be covered by the NDC. However, as shown in Figure.1 below, there are existing NDCs which do not cover all sectors and GHGs. There are also such NDCs which covers all sectors but not all GHGs. In short, it is not at all easy to objectively figure out whether A6.4ERs are generated from inside or outside of a host Party's NDC. Furthermore, there are some differences in definitions of sectors and GHGs used in NDCs which have been submitted by Parties to date. In case where inside or outside of a Party's NDC is defined by the Party on the basis of anything other than sectors and GHGs, as per the "among others" provision in the version 3 of the presidential draft texts, it is highly likely that it will be even more difficult to distinguish whether A6.4ERs generated in the Party are from inside or outside of its NDC. 	
Share of Proceeds	[A] SoP is not mentioned in Article 6.2, and therefore, our view is that adaptation finance through a SoP comes from the SoP as per Article 6.6, and a mandatory SoP cannot apply to Article 6.2.	1 May 2021 ¹³²
Transition of Legacy Units	Furthermore, there are various challenges in the transition of the CDM into the 6.4 mechanism such as the treatment of already issued certified emission reductions (CERs) as well as already registered CDM projects. There will be issues related to how to address the avoidance of double counting if the credit issued before 2020 is used under the Paris Agreement. Another issue is how the host country can avoid double counting if it uses the issued credit originated from the country for the achievement of its NDC in the post 2020 period under the Paris Agreement.	2 October 2017 ¹³³
	Least Developed Country (LDC) Group	

Least Developed Country (LDC) Group

The Least Developed Countries (LDC) Group on Climate Change coordinates the positions of 46 low-income countries defined as LDCs by the Committee for Development Policy (CDP), a subsidiary body of the United Nations Economic and Social Council, on the basis of their severe structural impediments, high vulnerability to economic and environmental shocks, and low levels of human assets.¹³⁴ Given its priority focus on the impacts of climate change, the LDC Group has consistently opposed any transition of legacy units issued under the Kyoto Protocol, and signaled opposition against allowing generation of Article 6.4 units from activities outside the scope of host country NDCs, although with the qualification that LDCs and Small Island Developing States (SIDS) should be able to credit such activities as long as a corresponding adjustment is applied. It has also unequivocally supported levying a mandatory share of proceeds (SOP) from ITMO transfers under Article 6.2, and appears supportive of a need for overall mitigation of global emissions (OMGE) under Article 6.2.

Negotiating Issue	Position	Date
	If the project activity is carried out in a sector outside the nationally determined contribution, similar rules to the Clean Development Mechanism should apply.	22 March 2017 ¹³⁵

Accounting for	The selling Party must record the transaction as a negative contributor to their nationally determined contribution if the unit is [is carried out within a sector	
Emission Reductions Outside NDCs	nominated under the NDC]. Particular Rules for Sustainable Development Mechanism Activities Outside the NDC (SDMOs)	
Outside NDCs	1. A Party that has indicated an NDC based on a quantified target or non-quantifiable or relative targets such as relative to BAU or relative to GDP, or those that set a range target or peaking year is eligible to sell units from a SDMO activity. Only a Party with an NDC that is quantified and measured against an absolute reduction determined by a base year or base line shall be eligible to purchase units from a SMDO activity.	
	3. Scope:	7 November 2017 ¹³⁶
	• The MMSD [Mechanism for Mitigation and Sustainable Development] activities may be undertaken by the host country in sectors nominated within their nationally determined contributions only.	
	• For Least Developed Countries MMSD activities may be undertaken by the host country within or outside sectors nominated in their nationally determined contributions, strategy, plans or actions for low greenhouse gas emissions development.	
	The issuance of Article 6.4 units for activities outside the NDCs was never agreed by the Parties, let alone how to avoid double counting for use of such units.	31 March 2021 ¹³⁷
	LDCs understand that A6.4ERs should only come from activities within NDCs. We understand that to manage global GHG emissions with environmental integrity towards avoiding a dangerous increase in temperature of 1.5° C, it is extremely important to ensure that all sectors are fully accounted for.	
	To that end, limiting article 6.4 participation to activities that are inside the scope of the NDCs provides incentives for Parties to broaden the scope of their NDCs. On the contrary, allowing issuance of A6.4ERs for activities outside the NDC would create a perverse incentive to Parties to keep sectors outside NDCs, if corresponding adjustments were not required, which would be contrary to Article 4.4 of the Paris Agreement.	
	Exception should be made only for LDCs and SIDSs that have strategy, plans or actions for low greenhouse gas emissions development, pursuant to 4.6 of the Paris Agreement. In this case, LDCs and SIDS could generate A6.4ERs from within their strategy, plans or action. In this case a corresponding adjustment would still need to be made.	
Share of Proceeds	19. Share of Proceeds: All ITMOs transactions should be subject to a 'share of proceeds' arrangement whereby a certain percentage of traded units would be reserved and paid into a centralised account maintained by the Central Oversight Mechanism to be used for funding adaptation activities. The centralized account would be a holding account for transfer to the Adaptation Fund, originally established under the Kyoto Protocol and through a decision authorised to operate under the Paris Agreement.	22 March 2017 ¹³⁸
	9. Share of Proceeds	7 November 2017 ¹³⁹
	• A share of proceeds from the sale of CAITMOs shall be used to support the Adaptation Fund. The share of proceeds shall be X % of issued units.	
	Article 6 Paragraph 1, states that the purpose of international voluntary cooperation is to allow for higher ambition in mitigation and adaptation, and to promote sustainable development and environmental integrity. It is consistent with these goals to extending them to all mechanism under the article. This is repeated in different forms throughout not only the article (Article 6 paragraph 2 promotes these same values, with article 6 paragraph 6 and paragraph 8 both explicitly incorporating adaptation) but the Paris Agreement and beyond. SoP applies to both Articles 6.2 and Article 6.4. This is consistent with previous practice, as under the Kyoto Protocol decision 1/CMP.8 extended SoP to all three market-based mechanisms. () The insistence on application of SoP to both 6.2 and 6.4 goes beyond equity. It is also a practical issue. While there is no question that a SoP will be levied when using the central mechanism elaborated upon in Article 6.4, treating activities under article 6.2 differently would lead to a preference for Article 6.2 cooperative approaches among buyers aiming to save money by avoiding a contribution to adaptation through this beneficial levy — which is specifically designed to assist particularly vulnerable developing countries in an element of solidarity. Ironically, the countries most able to avoid this beneficial levy, if 6.2 approaches were excluded from SoP, would be those countries wealthy enough to establish their own mechanisms and most able to contribute to a solidarity fund for adaptation. The LDC group requires that SoP for adaptation under both 6.2 and 6.4 be delivered to the Adaptation Fund.	31 March 2021 ¹⁴⁰
Transition of Legacy Units	Activities approved under the Kyoto Protocol shall not be carried over or used as CAITMOs ["Cooperative approach that involves the use of internationally transferred mitigation outcome"]	7 November 2017 ¹⁴¹
	Referring directly to your question, we do not believe there is any circumstance were CERs could be used towards NDCs. Whatever compromises are currently on the table whether they be in the form of:	8 June 2021 ¹⁴²

	 limiting the start date of activities, limiting units or having a cut-off date for carry-over, all of these proposals undermine current ambition. For the most vulnerable countries to the impacts of climate change we do not believe that any carry over in any form is acceptable. There is too much at stake. () Based on our previous answer, we do not believe that there should be any implementation of CERs. We do not believe LDCs are being unreasonable in stating this position. We cannot accept any further compromises that make it even more difficult to reach this target. 	
Overall Mitigation in Global Emissions	1. Net reduction in emissions: Any arrangement for the use of ITMOS must result in a net reduction in emissions. It must not simply be a transfer of mitigation obligations. To meet the net reduction requirement all ITMOs transferred under this arrangement must be discounted in the context of emission reduction units. One system of discounting would be to set a certain percentage of transferred units to be cancelled after the transaction.	22 March 2017 ¹⁴³
	To be clear, the LDCs support a mandatory cancellation of a percentage of every transaction. This is to be done by a procedure to cancel a percentage of ITMOs and Article 6 CERs at issuance. All cancelled units will be deposited in a cancellation account held by each issuing Party. The cancellation account cannot be used for any other purpose. Corresponding adjustments shall apply to all transactions, with the host country adjusting the full amount of ERs prior to the cancellation and the end use country applying only those ERs which remain.	11 June 2021 ¹⁴⁴
Baselines and Additionality	Additionality: Any SDMO or SDMI activity must be additional to actions that would have occurred in the absence of the Paris Agreement. The SDM Board may create a positive list of activities that have a high likelihood of additionality. Such projects would be the only ones eligible.	22 March 2017
	 4. International Governance The MMSD Supervisory Body shall draw from experience from the Clean Development Mechanism to ensure that: Business as usual projects or activities are not approved; Systems for establishing standardized baselines have a high level of integrity. 8. Accounting MMSD activities must be additional to those that would have occurred in the absence of the Paris Agreement. The MMSD Supervisory Body could formulate and achieve an approved approach for various standards relevant and compatible with wide variety of NDCs in order to: demonstrate quantification of mitigation, emission reductions; achieve results with real, measurable, and long-term benefits related to the mitigation of climate change; ensure claimed reductions in emissions levels are additional to any that would otherwise occur (). 	7 November 2017 ¹⁴⁵

Endnotes

Article 6.8 on non-market approaches are not further considered in this brief; for further details, however, see Karsten Karschunke, Thomas Forth, and Axel Michaelowa, 'Operationalizing Article 6.8 & 6.9 of the Paris Agreement' (Berlin: Deutsche Emissionshandelsstelle (DEHSt), 2021), https://www.carbon-mechanisms.de/fileadmin/media/dokumente/Publikationen/Bericht/A_6.8_6.9_Virtual_seminar_Key_messages. pdf. Annex 1 to this document reproduces the full text of Article 6.1 to 6.7 of the Paris Agreement.

- Benito Müller, 'Article 6: Market Approaches under the Paris Agreement', Policy Brief (Oxford: European Capacity Building Initiative (ECBI), April 2018), 7, https://ecbi.org/news/article-6-market-approaches-under-parisagreement.
- ³ James E. Edmonds et al., 'How Much Could Article 6 Enhance Nationally Determined Contribution Ambition toward Paris Agreement Goals through Economic Efficiency?', *Climate Change Economics* 12(2) (2021), 2150007, https://doi.org/10.1142/S201000782150007X.
- World Bank, Ecofys, and Vivid Economics, 'State and Trends of Carbon Pricing 2016' (Washington, DC: The World Bank, 2016), 80, https://doi.org/10.1596/978-1-4648-1001-5; Environmental Defense Fund (EDF), 'Catalyzing Carbon Markets Globally to Realize the Promise of Paris: The Power of Markets to Increase Ambition' (Washington, DC: Environmental Defense Fund (EDF), April 2018), 2–3, https://unfccc.int/sites/default/files/resource/236_Talanoa%20submission%20carbon%20markets%20potential% 20EDF%20April%203.pdf.
- ⁵ Michael A. Mehling, Gilbert E. Metcalf, and Robert N. Stavins, 'Linking Heterogeneous Climate Policies (Consistent with the Paris Agreement)', *Environmental Law* 48(4) (2018), 35.
- ⁶ Edmonds et al., 'How Much Could Article 6 Enhance Nationally Determined Contribution Ambition', *supra*, note 3; similarly Environmental Defense Fund (EDF), 'Catalyzing Carbon Markets', *supra*, note 4, 3.
- ⁷ United Nations Environment Programme (UNEP), 'The Emissions Gap Report 2020' (Nairobi: UNEP, 2020), https://www.unep.org/emissions-gap-report-2020.
- ⁸ Malin Ahlberg, 'Enhancing Ambition: Carbon Pricing as a Tool to Step up Mitigation Efforts', *Carbon Mechanisms Review* 6(3) (October 2018), 23–24.
- ⁹ UNFCCC, Nationally Determined Contributions under the Paris Agreement: Synthesis Report by the Secretariat, UN Doc. FCCC/PA/CMA/2021/2 (26 February 2021) para. 90; for earlier surveys, see International Emissions Trading Association (IETA), 'IETA Input to the Talanoa Dialogue' (International Emissions Trading Association (IETA), 2 April 2018), 2, https://unfccc.int/sites/default/files/resource/94_IETA%20input%20to%20TD_final.pdf; World Bank, 'State and Trends of Carbon Pricing 2021' (Washington, DC: World Bank, 2021), 51, https://doi.org/10.1596/978-1-4648-1728-1
- On the negotiating history of Article 6, see Andrew Howard, 'Voluntary Cooperation (Article 6)', in *The Paris Agreement on Climate Change: Analysis and Commentary*, ed. Daniel Klein et al. (Oxford, New York: Oxford University Press, 2017), 178–95.
- Harro van Asselt, Kati Kulovesi, and Michael A. Mehling, 'Negotiating the Paris Rulebook: Introduction to the Special Issue', *Carbon & Climate Law Review* 12(3) (2018): 173, https://doi.org/10.21552/cclr/2018/3/3.
- ¹² UNFCCC, Decision 1/CP.21, Adoption of the Paris Agreement, Report of the Conference of the Parties on its Twenty-First Session, Addendum, Part 2, UN Doc. FCCC/CP/2015/10/Add.1 (29 January 2016), para. 36.
- ¹³ Section III of Decision 1/CP.21, *supra* note 12.
- ¹⁴ Formally the Third Part of the First Session of the CMA, see UNFCCC, Decision 1/COP.23, Fiji Momentum for Implementation, Report of the Conference of the Parties on its Twenty-third Session, UN Doc. FCCC/CP/2017/11/Add.1 (8 February 2018), para. 2.
- ¹⁵ UNFCCC, Decision 1/CMA.1, Matters Relating to the Implementation of the Paris Agreement, Report of the Conference of the Parties Serving as the Meeting of the Parties to the Paris Agreement on the First Part of its First Session, Addendum, Part Two, UN Doc. FCCC/PA/CMA/2016/3/Add.1 (31 January 2017), paras. 5-7.
- ¹⁶ For commentary, see Lavanya Rajamani and Daniel Bodansky, 'The Paris Rulebook: Balancing International Prescriptiveness with National Discretion' *International and Comparative Law Quarterly* 68(4) (2019), 1023, doi:10.1017/S0020589319000320.

- ¹⁷ UNFCCC, Decision 9/CMA.2, Matters relating to Article 6 of the Paris Agreement, Report of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement on its Second Session, Addendum, Part Two, FCCC/PA/CMA/2019/6/Add.1 (16 March 2020), para. 2.
- ¹⁸ UNFCCC, Report by Minister Grace Fu (Singapore) and Minister Sveinung Rotevatn (Norway) on the Informal Ministerial Consultations on Article 6 of the Paris Agreement on 7 and 12 July (26 July 2021), 2, https://unfccc.int/sites/default/files/resource/Article%206%20Ministerial%20Consultations%20Report%20Back.p. df.
- ¹⁹ UNFCCC, Co-Chairs' Summary of the Presidencies' Consultations on Article 6 of the Paris Agreement (Cooperative Approaches, the Mechanism, the Framework for Non-market Approaches) (29-30 March 2021), 1, https://unfccc.int/sites/default/files/resource/Co-chairs_Summary_Article_6.pdf.
- ²⁰ UNFCCC, Heads of Delegation Briefing on Informal Ministerial Consultations on Article 6 of the Paris Agreement, Summary by the Chair (23 June 2021), 2, https://unfccc.int/sites/default/files/resource/20210623_Chairs_Summary_Art6.pdf.
- ²¹ For instance, China, India, the United States and Party groupings such as the Like-Minded Developing Countries (LMDC) which include India and China as well as the Umbrella Group which includes the U.S. have made very limited submissions on Article 6 of the Paris Agreement, despite their weight as political actors and in the case of the LMDC an influential role in the negotiations on Article 6.
- Andrei Marcu and Virender K. Duggal, 'Negotiations on Article 6 of the Paris Agreement: Road to Madrid' (Manila: Asian Development Bank (ADB), November 2019), 4, https://www.adb.org/sites/default/files/publication/541016/sdwp-063-negotiations-article-6-paris-agreement.pdf.
- Unless otherwise stated, reference is always to the third iteration (15 December 2019) of the relevant document, which, although unadopted, is considered the most mature of all draft negotiating texts, see UNFCCC, Draft Text on Matters Relating to Article 6 of the Paris Agreement: Guidance on Cooperative Approaches Referred to in Article 6, Paragraph 2, of the Paris Agreement, Proposal by the President, Version 3 (15 December 2019, 00:50 hrs.), https://unfccc.int/sites/default/files/resource/DT.CMA2_i11a.v3_0.pdf, and idem, Draft Text on Matters Relating to Article 6 of the Paris Agreement: Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement, Proposal by the President, Version 3 (15 December 2019, 01:10 hrs.), https://unfccc.int/sites/default/files/resource/CMA2_11b_DT_Art.6.4_.pdf.
- ²⁴ UNFCCC, Draft Text on Matters Relating to Article 6 of the Paris Agreement: Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, *supra*, note 23.
- ²⁵ Asian Development Bank (ADB), 'Decoding Article 6 of the Paris Agreement: Version II' (Manila: Asian Development Bank (ADB), 2020), 17, http://dx.doi.org/10.22617/TIM189218-2.
- ²⁶ UNFCCC, Subsidiary Body for Scientific and Technological Advice, Chair's Summary. Informal Technical Expert Dialogue on Article 6 of the Paris Agreement: Avoiding Double Use for Outside the Nationally Determined Contributions for the 6.4 Mechanism (11 May 2021), https://unfccc.int/sites/default/files/resource/2021A6ITED2on_avoiding%20double%20use_SBSTA%20Chair%2 Osummary_0.pdf.
- ²⁷ Axel Michaelowa, Aglaja Espelage, and Benito Müller, 'Negotiating Cooperation under Article 6 of the Paris Agreement: 2020 Update', Policy Brief (Oxford: European Capacity Building Initiative (ECBI), December 2020), 18, https://ecbi.org/sites/default/files/Article%206%202020.pdf.
- ²⁸ UNFCCC, Subsidiary Body for Scientific and Technological Advice, *supra*, note 26, 2-4.
- ²⁹ UNFCCC, Co-Chairs' Summary of the Presidencies' Consultations on Article 6, *supra*, note 19, 2.
- 30 UNFCCC, July Ministerial Meeting: Finalising Article 6 in the Paris Rulebook, 1, https://unfccc.int/sites/default/files/resource/July%20Ministerial%20Meeting%20-%20Finalising%20Article%206%20in%20the%20Paris%20Rulebook.pdf.
- ³¹ UNFCCC, Co-Chairs' Summary of the Presidencies' Consultations on Article 6, *supra*, note 19, 2.
- ³² A related issue that remains unresolved are the details of implementation of a SOP under Article 6.4, such as SOP rates and governance; unlike Article 6.2, however, the requirement of an SOP is broadly recognized for Article 6.4 due to the unambiguous wording of Article 6.6 of the Paris Agreement.
- ³³ UNFCCC, Draft Text on Matters Relating to Article 6 of the Paris Agreement: Guidance on Cooperative Approaches Referred to in Article 6, Paragraph 2, *supra*, note 23.
- ³⁴ UNFCCC, Subsidiary Body for Scientific and Technological Advice, Chair's Summary. Informal Technical Expert Dialogue on Article 6 of the Paris Agreement: Financing for Adaptation/Share of Proceeds (Article 6.2 and 6.4) (11 May 2021), 3, https://unfccc.int/sites/default/files/resource/2021A6ITED1on_SOP_SBSTA%20Chair%20summary.pdf.
- 35 Michaelowa, Espelage, and Müller, 'Negotiating Cooperation under Article 6', *supra*, note 27, 20–21.
- ³⁶ UNFCCC, Co-Chairs' summary of the Presidencies' Consultations on Article 6, *supra*, note 19, 2.

- ³⁷ UNFCCC, July Ministerial Meeting: Finalising Article 6 in the Paris Rulebook, 2.
- ³⁸ CarbonBrief, 'COP25: Key Outcomes Agreed at the UN Climate Talks in Madrid' (15 December 2019), https://www.carbonbrief.org/cop25-key-outcomes-agreed-at-the-un-climate-talks-in-madrid; Axel Michaelowa et al., 'Operationalizing the Share of Proceeds under Article 6' (Amsterdam et al.: Climate Focus and Perspectives, 2019), https://www.climatefinanceinnovators.com/wp-content/uploads/2019/06/Operationalizing-the-SoP_web.pdf.
- ³⁹ Related issues that remain unresolved are the treatment of other Kyoto Protocol units, such as Assigned Amount Units (AAUs), of legacy activities registered under the CDM, and of new units these may issue after 2020. Views on these issues are less far apart than they are on the treatment of legacy CERs generated before 2020. For further discussion, see Luca Lo Re and Jane Ellis, 'Operationalising the Article 6.4 Mechanism: Options and Implications of CDM Activity Transition and New Activity Registration' (Paris: OECD/IEA, 2021), https://doi.org/10.1787/08ce04ee-en.
- ⁴⁰ UNFCCC, Draft Text on Matters Relating to Article 6 of the Paris Agreement: Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, *supra*, note 23.
- ⁴¹ UNFCCC, Subsidiary Body for Scientific and Technological Advice, Chair's Summary. Informal Consultations/Informal Technical Expert Dialogue on Article 6 of the Paris Agreement: Use of Kyoto Protocol Units towards NDCs (12 June 2021), 1, https://unfccc.int/sites/default/files/resource/Inf_note04_Article%206.pdf.
- ⁴² Climate Analytics, 'Article 6 Needs Ambition, not Time Wasting: The Carryover of Pre-2020 Credits Could Fatally Undermine the Paris Agreement' (Berlin: Climate Analytics, 2019), 3, https://climateanalytics.org/media/carry_over_ca_briefing_11dec2019.pdf.
- ⁴³ UNFCCC, Article 6 of the Paris Agreement: Informal Technical Expert Dialogues. CDM Transition. (Presentation by Secretariat, September UNFCCC and October https://unfccc.int/sites/default/files/resource/Art.%206%20_presentation%20ITEDs%20CDM%20transition.pdf; see also Axel Michaelowa et al., 'Volumes and Types of Unused Certified Emission Reductions (CERs)' (Freiburg et Perspectives and Zurich University **Applied** Sciences (ZHAW), of 2021), https://www.zhaw.ch/storage/sml/institute-zentren/cee/PCG-ZHAW_unused_CERs_final_clean_PAC.pdf.
- ⁴⁴ Although no universally agreed definition of 'overall mitigation in global emissions' exists, it is widely understood as referring to an outcome of voluntary cooperation that results in net emission reductions, rather than merely shifting the location of emissions through a zero-sum game, see Lambert Schneider et al., 'Operationalising an "Overall Mitigation in Global Emissions" under Article 6 of the Paris Agreement' (Berlin: NewClimate Institute, November 2018), https://newclimate.org/wp-content/uploads/2018/11/Operationalising-OMGE-in-Article6.pdf.
- ⁴⁵ UNFCCC, Draft Text on Matters Relating to Article 6 of the Paris Agreement: Guidance on Cooperative Approaches Referred to in Article 6, Paragraph 2, *supra*, note 23.
- ⁴⁶ Asian Development Bank (ADB), 'Decoding Article 6', supra, note 25, 40.
- ⁴⁷ Michaelowa, Espelage, and Müller, 'Negotiating Cooperation under Article 6', *supra*, note 27, 22.
- ⁴⁸ UNFCCC, Co-Chairs' Summary of the Presidencies' Consultations on Article 6, supra, note 19, 2.
- ⁴⁹ UNFCCC, Baselines and Additionality in the 6.4 Mechanism: Informal Meeting of Article 6 Experts (Presentation by the UNFCCC Secretariat, November 2020). https://unfccc.int/sites/default/files/resource/Baselines_and_additionality_PA_Article_6.pdf. For a discussion of differences and similarities of BAT and benchmark approaches, see Axel Michaelowa et al., 'Best Available Technology and Benchmark Baseline Setting under the Article 6.4 Mechanism' (Freiburg: Perspectives, 2021), https://www.perspectives.cc/public/fileadmin/user_upload/BAT_in_6.4_discussion_paper_30.08.21_final.pdf; general aspects of baseline setting under Article 6 are analyzed by Axel Michaelowa, Hanna-Mari Ahonen and Aglaja Espelage, 'Setting Crediting Baselines under Article 6 of the Paris Agreement', CMM Working Group Discussion Paper (Freiburg: Perspectives, 2021), https://www.carbonmechanisms.de/fileadmin/media/dokumente/Publikationen/Policy Paper/Setting crediting baselines under Articl e6.pdf; and Axel Michaelowa et al., 'Additionality Revisited: Guarding the Integrity of Market Mechanisms under the Paris Agreement', Climate Policy, 19(10) (2019), 1211, https://doi.org/10.1080/14693062.2019.1628695.
- ⁵⁰ Michaelowa, Espelage, and Müller, 'Negotiating Cooperation under Article 6', *supra*, note 27, 25.
- ⁵¹ UNFCCC, Draft Text on Matters Relating to Article 6 of the Paris Agreement: Guidance on Cooperative Approaches Referred to in Article 6, Paragraph 2, *supra*, note 23.
- ⁵² IISD Reporting Services, 'Summary of the May-June 2021 Climate Change Conference: 31 May-17 June 2021', *Earth Negotiations Bulletin* 12(780) (21 June 2021), 12, https://enb.iisd.org/sites/default/files/2021-06/enb12780e.pdf.
- 53 Stephan Hoch et al., 'Closing the Deal on "CDM Transition": How COP 25 Defined New Guardrails for Compromise and what They Mean for Africa' (Freiburg: Perspectives Climate Group, 2020), 17, https://www.climatefinanceinnovators.com/wp-content/uploads/2020/05/Closing-the-deal-on-CDM-Transition_web.pdf.
- ⁵⁴ Climate Analytics, 'Article 6 Needs Ambition, not Time Wasting', *supra*, note 42, 3, https://climateanalytics.org/media/carry_over_ca_briefing_11dec2019.pdf.

- 55 Harry Fearnehough et al., 'Analysis of Options for Determining OMGE, SOP and Transition within Article 6: Implications of Policy Decisions for International Crediting under the Paris Agreement' (Berlin: Climate Analytics, May 2021), 8, https://www.oeko.de/fileadmin/oekodoc/Analysis-of-options-for-determining-OMGE-SOP-Transition-within-Article-6_May2021.pdf.
- ⁵⁶ See, respectively, UNFCCC, Article 6 of the Paris Agreement: Informal Technical Expert Dialogues. CDM Transition. (Presentation by the UNFCCC Secretariat, September and October 2021), https://unfccc.int/sites/default/files/resource/Art.%206%20_presentation%20ITEDs%20CDM%20transition.pdf; and Axel Michaelowa et al., 'Volumes and Types of Unused Certified Emission Reductions (CERs)', *supra*, note 43.
- With regard to different scenarios for the transition of legacy CERs, for instance, see the tradeoffs identified by Sandra Greiner et al., 'CDM Transition to Article 6 of the Paris Agreement: Options Report' (Bonn et al.: Koru Climate and Climate Focus, March 2017), 43-44, https://www.climatefocus.com/sites/default/files/CDM%20Transition%20Options%20Report%20v2.0.pdf.
- ⁵⁸ Case of the S.S. Lotus (France v. Turkey), Judgment, 1927 P.C.I.J. (ser. A) No. 10, at 45–47 (7 September 1927).
- ⁵⁹ IISD Reporting Services, 'Summary of the Chile/Madrid Climate Change Conference: 2-15 December 2019', Earth Negotiations Bulletin 12(775) (18 December 2019): 15, https://enb.iisd.org/events/chilemadrid-climate-change-conference-december-2019/summary-report-2-15-december-2019.
- 60 World Bank, 'State and Trends of Carbon Pricing 2021', supra, note 9, 50.
- 61 Sandra Greiner et al., 'Article 6 Piloting: State of Play and Stakeholder Experiences' (Berlin: Climate Focus et al., 2020), https://www.climatefocus.com/sites/default/files/Climate-Finance-Innovators_Article-6-piloting_State-of-play-and-stakeholder-experiences December-2020.pdf.
- ⁶² UNEP DTU Partnership, 'Article 6 Pipeline Analysis and Database' (Copenhagen: Technical University of Denmark, 2021), https://article6pipeline.org.
- ⁶³ Marian Mraz, 'Identifying Potential Policy Approaches under Article 6 of the Paris Agreement' (Seoul: Global Green Growth Institute, 2021), https://gggi.org/site/assets/uploads/2021/01/Policy-Approaches-under-PA-Article-6210121.pdf.
- ⁶⁴ Greiner et al., 'Article 6 Piloting: State of Play and Stakeholder Experiences', supra, note 61, 26.
- 65 Greiner et al., 'Article 6 Piloting: State of Play and Stakeholder Experiences', supra, note 61.
- 66 Ibid., 15-16.
- 67 Ibid., 18.
- 68 Ibid., 19.
- 69 Sandra Greiner et al., 'Moving Towards Next Generation Carbon Markets: Observations from Article 6 Pilots' (Berlin: Climate Focus et al., 2019), https://www.carbon-mechanisms.de/fileadmin/media/dokumente/Publikationen/Studie/Studie_2019_CFI_Article_6_Pilots.pdf.
- ⁷⁰ Greiner et al., 'Article 6 Piloting: State of Play and Stakeholder Experiences', *supra*, note 61.
- UNFCCC, Decision 18/CMA.1, Modalities, Procedures and Guidelines for the Transparency Framework for Action and Support Referred to in Article 13 of the Paris Agreement, Report of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement on the Third Part of its First Session, Addendum, Part 2, UN Doc. FCCC/PA/CMA/2018/3/Add.2 (19 March 2019), para. 77(d).
- ⁷² Greiner et al., 'Article 6 Piloting: State of Play and Stakeholder Experiences', *supra*, note 61, 3, 42. It is worth noting, however, that not all Parties agree that para. 77(d) of Decision 18/CMA.1, *supra*, note 71, allows for use of Article 6.2 at the discretion of cooperating Parties.
- ⁷³ UNFCCC, Report by Minister Grace Fu (Singapore) and Minister Sveinung Rotevatn (Norway), *supra*, note 18, 2.
- ⁷⁴ World Bank, 'State and Trends of Carbon Pricing 2021', *supra*, note 9, 50.
- ⁷⁵ Costa Rica et al., 'San Jose Principles for High Ambition and Integrity in International Carbon Markets' (30 October 2019), https://cambioclimatico.go.cr/sanjoseprinciples/about-the-san-jose-principles.
- ⁷⁶ Michael A. Mehling, 'Governing Cooperative Approaches under the Paris Agreement', *Ecology Law Quarterly* 46, no. 3 (2020), 765-828, https://doi.org/10.15779/Z389G5GD97.
- Martti Koskenniemi, From Apology to Utopia: The Structure of International Legal Argument (Cambridge: Cambridge University Press, 2006).
- VINFCCC, 'Party Groupings' (n.d.), https://unfccc.int/process-and-meetings/parties-non-party-stakeholders/parties/party-groupings. Member countries are, in alphabetical order, Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic (CAR), Chad, Comoros, Cote d'Ivoire, Democratic Republic of the Congo (DRC), Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Republic of the Congo, Rwanda, Sao Tome and Principe,

- Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Tanzania, Togo, Tunisia, Uganda, Zambia, and Zimbabwe.
- ⁷⁹ African Group of Negotiators (AGN), 'About the AGN' (n.d.), https://africangroupofnegotiators.org.
- WNFCCC, Submission by the Republic of Mali on behalf of the African Group of Negotiators (AGN) on Rules, Modalities and Procedures for the Mechanism Established by Article 6, paragraph 4, of the Paris Agreement (Agenda sub-item 10(b)) (22 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/586_345_131531477836793644-AGN%20Submission%20on%20SBSTA%2047%20Art.%206.4.pdf.
- 81 UNFCCC, Submission by the Republic of Mali on behalf of the African Group of Negotiators (AGN) on Rules, Modalities and Procedures for the Mechanism Established by Article 6, paragraph 4, of the Paris Agreement (Agenda sub-item 10(b)) (27 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/586_318_131350323555397454-Submission%20by%20the%20Republic%20of%20Mali%20on%20behalf%20of%20the%20AGN_SBSTA%2046_Art.%206.4%20March%202017.pdf.
- WNFCCC, Submission by the Republic of Mali on behalf of the African Group of Negotiators (AGN) on Guidance on Cooperative Approaches Referred to in Article 6, paragraph 2, of the Paris Agreement (Agenda sub-item 11 (a)) (22 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/586_344_131531477338494612-AGN%20Submission%20on%20SBSTA%2047%20Art.%206.2.pdf.
- 83 UNFCCC, Submission by the Republic of Gabon on behalf of the African Group of Negotiators (AGN) on Financing for Adaptation/Share of Proceeds (Article 6.2 and Article 6.4 of the Paris Agreement) (14 April 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202104141458--- AGN%20submission%20on%20financing%20for%20Adaptation%20from%20Article%206%20of%20the%20PA.pd f.
- 84 UNFCCC, Submission by the Republic of Mali on behalf of the African Group of Negotiators (AGN) on Rules, Modalities and Procedures for the Mechanism Established by Article 6, paragraph 4, of the Paris Agreement (Agenda sub-item 10(b)) (27 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/586_318_131350323555397454-Submission%20by%20the%20Republic%20of%20Mali%20on%20behalf%20of%20the%20AGN_SBSTA%2046_Art..%206.4%20March%202017.pdf.
- 85 UNFCCC, Submission by the Republic of Mali on behalf of the African Group of Negotiators (AGN) on Guidance on Cooperative Approaches Referred to in Article 6, paragraph 2, of the Paris Agreement (Agenda sub-item 11 (a)) (22 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/586_344_131531477338494612-AGN%20Submission%20on%20SBSTA%2047%20Art.%206.2.pdf.
- Membership of AOSIS is comprised of, in the Atlantic Ocean: Cabo Verde, Guinea-Bissau, and São Tomé and Príncipe; in the Caribbean: Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago; in the Indian Ocean: Comoros, Maldives, Seychelles, and Mauritius; in the Pacific Ocean: Cook Islands, Fiji, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, and Vanuatu; in the South China Sea: Singapore.
- 87 UNFCCC, Submission of Views on the Content of Article 6.2 Guidance and Article 6.4 Rules, Modalities and Procedures, Presented by the Republic of the Maldives on Behalf of the Alliance of Small Island States (4 November 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/167_344_131542508049675849-AOSIS%20Submission%20on%20Art%206.2%20and%20%206.4.Nov.2017.cleandocx.pdf.
- WNFCCC, Submission. Article 6 of the Paris Agreement (Markets & Non-Market Approaches). Avoidance of Double Use for Outside the Nationally Determined Contributions under Article 6.4 of the Paris Agreement. Presented by Antigua and Barbuda on Behalf of the Alliance of Small Island States (19 May 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202105190854---AOSIS%20-%20PA%20Article%206%20-%20Submission%20on%20Double%20Use%20-%202021-05-05.pdf.
- 89 UNFCCC, Submission to the Articles 6.2 and 6.4 of the Paris Agreement by the Republic of the Maldives on Behalf of the Alliance of Small Island States (27 April 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/167_318_131382305846319606-AOSIS_Submission_Art%206%202%20and%206%204%20of%20%20PA.27.04.2017.FINAL.pdf.
- ⁹⁰ UNFCCC, Submission of Views on the Content of Article 6.2 Guidance and Article 6.4 Rules, Modalities and Procedures, Presented by the Republic of the Maldives on Behalf of the Alliance of Small Island States (4 November 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/167_344_131542508049675849-AOSIS%20Submission%20on%20Art%206.2%20and%20%206.4.Nov.2017.cleandocx.pdf.

- ⁹¹ UNFCCC, Submission. Article 6 of the Paris Agreement (Markets & Non-Market Approaches). Financing for Adaptation/Share of Proceeds (Article 6.2 and Article 6.4), Presented by Antigua and Barbuda on Behalf of the Alliance of Small Island States (19 May 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202105190854--AOSIS%20-%20PA%20Article%206%20-%20Submission%20on%20Share%20of%20Proceeds%20-%202021-05-05.pdf.
- ⁹² UNFCCC, Submission of Views on the Content of Article 6.2 Guidance and Article 6.4 Rules, Modalities and Procedures, Presented by the Republic of the Maldives on Behalf of the Alliance of Small Island States (4 November 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/167_344_131542508049675849-AOSIS%20Submission%20on%20Art%206.2%20and%20%206.4.Nov.2017.cleandocx.pdf.
- ⁹³ UNFCCC, Submission to the Articles 6.2 and 6.4 of the Paris Agreement by the Republic of the Maldives on Behalf of the Alliance of Small Island States (27 April 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/167_318_131382305846319606-AOSIS_Submission_Art%206%202%20and%206%204%20of%20%20PA.27.04.2017.FINAL.pdf.
- ⁹⁴ UNFCCC, Submission of Views on the Content of Article 6.2 Guidance and Article 6.4 Rules, Modalities and Procedures, Presented by the Republic of the Maldives on Behalf of the Alliance of Small Island States (4 November 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/167_344_131542508049675849-AOSIS%20Submission%20on%20Art%206.2%20and%20%206.4.Nov.2017.cleandocx.pdf.
- UNFCCC, 'Party Groupings' (n.d.), https://unfccc.int/process-and-meetings/parties-non-party-stakeholders/parties/party-groupings. Membership of the Arab Group comprises, in alphabetical order, Algeria, Bahrain, Comoros, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Mauritania, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen.
- ⁹⁶ UNFCCC, Informal Submission by Egypt on behalf of the Arab Group on Avoiding Double Use for Outside the Nationally Determined Contributions (NDC) for Article 6.4 (16 April 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202104161824--- Informal%20Submission%20by%20Egypt%20on%20behalf%20of%20Arab%20Group%20on%20Avoiding%20dou ble%20counting%2064.pdf.
- ⁹⁷ UNFCCC, Submission by Saudi Arabia on Behalf of the Arab Group on Articles 6.2 and 6.4 of the Paris Agreement (18 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/102_344_131528208729884421-Arab%20Group%20Submission%20on%20Articles%206.2%20and%206.4%20of%20the%20Paris%20Agreement%2 0by%20KSA.pdf.
- ⁹⁸ UNFCCC, Informal Submission by Egypt on Behalf of the Arab Group on Article 6 of the Paris Agreement under the UNFCCC (The Issue of Share of Proceeds for Adaptation) (12 April 2021), https://unfccc.int/sites/default/files/resource/Informal%20Submission%20by%20Egypt%20on%20behalf%20of%20Arab%20Group%20on%20Share%20of%20Proceeds%20for%20Adaptation.pdf.
- ⁹⁹ UNFCCC, Views of Brazil on the Process Related to the Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement (9 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/73_345_131520606207054109-BRAZIL%20-%20Article%206.4%20FINAL.pdf.
- UNFCCC, Views of Brazil on the Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement (1 April 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202104012104---BR%20-%20Submission%20-%20Article%206.pdf.
- ¹⁰¹ UNFCCC, Views of Brazil on the Process Related to the Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement (31 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/525_318_131354420270499165-BRAZIL%20-%20Article%206.4.%20SBSTA46%20May%202017.%20FINAL.pdf.
- ¹⁰² UNFCCC, Views of Brazil on the Process Related to the Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement (9 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/73_345_131520606207054109-BRAZIL%20-%20Article%206.4%20FINAL.pdf.
- ¹⁰³ UNFCCC, Views of Brazil on the Process Related to the Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement (31 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/525_318_131354420270499165-BRAZIL%20-%20Article%206.4.%20SBSTA46%20May%202017.%20FINAL.pdf.
- UNFCCC, Views of Brazil on the Process Related to the Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement (9 October 2017),

- https://www4.unfccc.int/sites/SubmissionsStaging/Documents/73_345_131520606207054109-BRAZIL%20-%20Article%206.4%20FINAL.pdf.
- UNFCCC, 'Party Groupings' (n.d.), https://unfccc.int/process-and-meetings/parties-non-party-stakeholders/parties/party-groupings.
- ¹⁰⁶ UNFCCC, Submission on Article 6 of the Paris Agreement by Liechtenstein, Mexico, Monaco, Switzerland (31 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201_344_131539145484986739-Article%206%20SBSTA%2047%20LIE%20MEX%20MON%20CH.pdf.
- ¹⁰⁷ UNFCCC, Submission by Switzerland on Behalf of the Environmental Integrity Group (15 April 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202104152111---EIG%20SBSTA%20Submission%20on%20adaptation%20and%206.4%20accounting.pdf.
- ¹⁰⁸ UNFCCC, Submission by Switzerland on Behalf of the Environmental Integrity Group (15 April 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202104152111---EIG%20SBSTA%20Submission%20on%20adaptation%20and%206.4%20accounting.pdf.
- ¹⁰⁹ UNFCCC, Submission on Article 6 of the Paris Agreement by Liechtenstein, Mexico, Monaco, Switzerland (21 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201_318_131345583587560948-170321_Market_FINAL.pdf.
- UNFCCC, Submission on Article 6 of the Paris Agreement by Liechtenstein, Mexico, Monaco, Switzerland (21 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201_318_131345583587560948-170321_Market_FINAL.pdf.
- UNFCCC, Submission on Article 6 of the Paris Agreement by Liechtenstein, Mexico, Monaco, Switzerland (31 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/201_344_131539145484986739-Article%206%20SBSTA%2047%20LIE%20MEX%20MON%20CH.pdf.
- UNFCCC, 'Party Groupings' (n.d.), https://unfccc.int/process-and-meetings/parties-non-party-stakeholders/parties/party-groupings.
- 113 UNFCCC, Submission by the Republic of Malta and the European Commission on Behalf of the European Union and Its Member States (21 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/783_318_131345686042460524-MT-03-21-EU%20SBSTA%2012a%20b%20and%20c%20EU%20Submission%20Article%206.pdf.
- UNFCCC, Submission by Estonia and the European Commission on Behalf of the European Union and Its Member States (6 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/783_344_131517552905177783-EE-06-10-SBSTA%2010%20a-b-c_EU%20Submission%20on%20Art%206.pdf.
- ¹¹⁵ UNFCCC, Submission by Portugal and the European Commission on Behalf of the European Union and its Member States. Use of Kyoto Protocol Units Towards NDCs in the Context of the June 2021 Subsidiary Bodies Sessional Period (16 June 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202106161529---PT-06-16-2021%20EU%20Submission%20Kyoto%20units.pdf.
- ¹¹⁶ UNFCCC, Submission by Portugal and the European Commission on Behalf of the European Union and its Member States. Voluntary EU Submission on the Topic Avoiding Double Use for Outside the NDC for Article 6.4 to Advise the SBSTA Regarding the Informal Technical Expert Dialogues to be held until June 2021 (12 April 2021), <a href="https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202104121058---PT-12-04-2021%20EU%20Submission%20on%20Avoiding%20double%20use%20for%20outside%20the%20NDC%20for%20Article%206.4.pdf.
- 117 UNFCCC, Submission by the Republic of Malta and the European Commission on Behalf of the European Union and Its Member States (21 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/783_318_131345686042460524-MT-03-21-EU%20SBSTA%2012a%20b%20and%20c%20EU%20Submission%20Article%206.pdf.
- UNFCCC, Submission by Estonia and the European Commission on Behalf of the European Union and Its Member States (6 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/783_344_131517552905177783-EE-06-10-SBSTA%2010%20a-b-c_EU%20Submission%20on%20Art%206.pdf.
- ¹¹⁹ UNFCCC, Submission by Portugal and the European Commission on Behalf of the European Union and its Member States. Use of Kyoto Protocol Units Towards NDCs in the Context of the June 2021 Subsidiary Bodies Sessional Period (16 June 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202106161529---PT-06-16-2021%20EU%20Submission%20Kyoto%20units.pdf.
- ¹²⁰ UNFCCC, Submission by the Republic of Malta and the European Commission on Behalf of the European Union and Its Member States (21 March 2017),

- $https://www4.unfccc.int/sites/SubmissionsStaging/Documents/783_318_131345686042460524-MT-03-21-EU\%20SBSTA\%2012a\%20b\%20and\%20c\%20EU\%20Submission\%20Article\%206.pdf.$
- ¹²¹ UNFCCC, Submission by Estonia and the European Commission on Behalf of the European Union and Its Member States (6 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/783_344_131517552905177783-EE-06-10-SBSTA%2010%20a-b-c_EU%20Submission%20on%20Art%206.pdf.
- ¹²² Independent Association of Latin America and the Caribbean (AILAC), 'About AILAC' (n.d.), http://ailac.org/en/sobre. Its membership currently consists of, in alphabetical order, Chile, Colombia, Costa Rica, Guatemala, Honduras, Panama, Paraguay, and Peru.
- 123 UNFCCC, Submission by Perú on Behalf of the AILAC Group of Countries Composed by Chile, Colombia, Costa Rica, Honduras, Guatemala, Panama, Paraguay and Peru (26 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/863_344_131535500100258070-171025%20AILAC%20submission%20Article%206%202017%20II%20vF.pdf
- 124 UNFCCC, Submission by Paraguay on Behalf of the AILAC Group of Countries Composed by Chile, Colombia, Costa Rica, Honduras, Guatemala, Panama, Paraguay and Peru. Avoiding Double Use for Outside the Nationally Determined Contribution (NDC) for Article 6.4 (27 May 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202105271107---210520%20AILAC%20submission%20article%206.4%20-%20avoiding%20double%20use%20of%20MO%20vf.pdf.
- UNFCCC, Submission by Perú on Behalf of the AILAC Group of Countries Composed by Chile, Colombia, Costa Rica, Honduras, Guatemala, Panama, Paraguay and Peru (26 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/863_344_131535500100258070-171025%20AILAC%20submission%20Article%206%202017%20II%20vF.pdf
- ¹²⁶ UNFCCC, Submission by Paraguay on Behalf of the AILAC Group of Countries Composed by Chile, Colombia, Costa Rica, Honduras, Guatemala, Panama, Paraguay and Peru. Financing for Adaptation through Article 6 (27 May 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202105271058---210520%20AILAC%20submission%20Adaptation%20finance%20through%20article%206%20vf.pdf.
- 127 UNFCCC, Submission by Perú on Behalf of the AILAC Group of Countries Composed by Chile, Colombia, Costa Rica, Honduras, Guatemala, Panama, Paraguay and Peru (26 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/863_344_131535500100258070-171025%20AILAC%20submission%20Article%206%202017%20II%20vF.pdf
- 128 UNFCCC, Submission by Perú on Behalf of the AILAC Group of Countries Composed by Chile, Colombia, Costa Rica, Honduras, Guatemala, Panama, Paraguay and Peru (26 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/863_344_131535500100258070-171025%20AILAC%20submission%20Article%206%202017%20II%20vF.pdf
- ¹²⁹ UNFCCC, Japan's Submission on SBSTA item 10 (a). Guidance on Cooperative Approaches Referred to in Article 6, Paragraph 2, of the Paris Agreement (2 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/579_344_131516859040704385-Japan_Submission_6.2_20171002.pdf.
- ¹³⁰ UNFCCC, Japan's Submission on SBSTA Item 10 (b). Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement (2 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/579_345_131516859625392385-Japan_Submission_6.4_20171002.pdf.
- ¹³¹ UNFCCC, Japan's submission on Article 6 of the Paris Agreement. Avoiding Double Use of Emissions Reductions achieved Outside the Nationally Determined Contributions, Article 6.4 (1 May 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202105010041--- Japan_Article%206%20of%20the%20Paris%20Agreement_Avoiding%20double%20use%20of%20emissions%20red uctions_Submission_202104.pdf.
- 132 UNFCCC, Japan's Submission on Article 6 of the Paris Agreement Financing for Adaptation/Share of Proceeds (Article 6.2 and Article 6.4) (1 May 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202105010038--- Japan_Article%206%20of%20the%20Paris%20Agreement%20Financing%20for%20adaptationShare%20of%20Proceeds%20_Submission_202104.pdf.
- ¹³³ UNFCCC, Japan's Submission on SBSTA Item 10 (b). Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement (2 October 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/579_345_131516859625392385-Japan_Submission_6.4_20171002.pdf.

- 134 United Nations Committee for Development Policy, 'List of Least Developed Countries' (11 February 2021), https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/ldc_list.pdf. Current membership of the LDC Group comprises, in alphabetical order, Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic Chad, Comoros, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People's Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, São Tomé and Príncipe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, United Republic of Tanzania, Yemen, and Zambia.
- ¹³⁵ UNFCCC, Submission by the Federal Democratic Republic of Ethiopia on behalf of the Least Developed Countries Group on the Operationalization of Article 6, paragraph 4 of the Paris Agreement (22 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/786_318_131371561949441465-LDC%20Group%20submission%20on%20operationalization%20of%20Art%206.4.pdf.
- ¹³⁶ UNFCCC, LDC Submission on Matters Relating under Article 6, paragraph 4 of the Paris Agreement (7 November 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/786_345_131545219331063552-LDC%20Group%20Submission%20on%20Article%206.4%20.pdf.
- 137 UNFCCC, Submission to the SBSTA Chair by the Kingdom of Bhutan on behalf of the Least Developed Countries Group: Avoiding Double Use for Outside the Nationally Determined Contributions (NDC) for Article 6.4 (31 March 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202104211414---Avoiding%20double%20use%20of%20emissions%20reductions%20achieved%20outside%20the%20nationally%20d etermined%20contribution.pdf.
- ¹³⁸ UNFCCC, Submission by the Federal Democratic Republic of Ethiopia on behalf of the Least Developed Countries Group on the Operationalization of Article 6, paragraph 2 of the Paris Agreement (22 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/786_317_131356565779926468-LDC%20Group%20submission%20on%20operationalization%20of%20Art%206.2.pdf.
- ¹³⁹ UNFCCC, LDC Submission on Accounting under Article 6, Paragraph 2 of the Paris Agreement (7 November 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/786_344_131545218938487493-LDC%20Group%20Submission%20on%20Article%206.2.pdf.
- ¹⁴⁰ UNFCCC, Submission to the SBSTA Chair by the Kingdom of Bhutan on behalf of the Least Developed Countries Group: Financing for Adaptation/Share of Proceeds (Article 6.2 and Article 6.4) (31 March 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202104211416--Financing%20for%20adaptation%20Share%20of%20Proceeds%20(Article%206.2%20and%20Article%206.4).pdf.
- ¹⁴¹ UNFCCC, LDC Submission on Accounting under Article 6, Paragraph 2 of the Paris Agreement (7 November 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/786_344_131545218938487493-LDC%20Group%20Submission%20on%20Article%206.2.pdf.
- ¹⁴² UNFCCC, Submission by Bhutan on behalf of Least Developed Countries Group on Use of Kyoto Protocol units towards NDCs (8 June 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202106250950----Use%20of%20KP%20Units%20towards%20NDCs_LDC%20Group_8%20June.pdf.
- ¹⁴³ UNFCCC, Submission by the Federal Democratic Republic of Ethiopia on behalf of the Least Developed Countries Group on the Operationalization of Article 6, paragraph 2 of the Paris Agreement (22 March 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/786_317_131356565779926468-LDC%20Group%20submission%20on%20operationalization%20of%20Art%206.2.pdf.
- ¹⁴⁴ UNFCCC, Submission by Bhutan on behalf of Least Developed Countries Group on Implementing Overall Mitigation in Global Emissions in the Mechanism (11 June 2021), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202106251008--- Implementing%20OMGE%20in%20the%20Art6%20mechanism_LDC%20Group_5%20June.pdf.
- ¹⁴⁵ UNFCCC, LDC Submission on Matters Relating under Article 6, paragraph 4 of the Paris Agreement (7 November 2017), https://www4.unfccc.int/sites/SubmissionsStaging/Documents/786_345_131545219331063552-LDC%20Group%20Submission%20on%20Article%206.4%20.pdf.



MIT Center for Energy and Environmental Policy Research

Since 1977, the Center for Energy and Environmental Policy Research (CEEPR) has been a focal point for research on energy and environmental policy at MIT. CEEPR promotes rigorous, objective research for improved decision making in government and the private sector, and secures the relevance of its work through close cooperation with industry partners from around the globe. Drawing on the unparalleled resources available at MIT, affiliated faculty and research staff as well as international research associates contribute to the empirical study of a wide range of policy issues related to energy supply, energy demand, and the environment.

An important dissemination channel for these research efforts is the MIT CEEPR Working Paper series. CEEPR releases Working Papers written by researchers from MIT and other academic institutions in order to enable timely consideration and reaction to energy and environmental policy research, but does not conduct a selection process or peer review prior to posting. CEEPR's posting of a Working Paper, therefore, does not constitute an endorsement of the accuracy or merit of the Working Paper. If you have questions about a particular Working Paper, please contact the authors or their home institutions.

MIT Center for Energy and Environmental Policy Research

77 Massachusetts Avenue, E19-411 Cambridge, MA 02139 USA

Website: ceepr.mit.edu

MIT CEEPR Working Paper Series is published by the MIT Center for Energy and Environmental Policy Research from submissions by affiliated researchers.

Copyright © 2021 Massachusetts Institute of Technology For inquiries and/or for permission to reproduce material in this working paper, please contact:

Email ceepr@mit.edu Phone (617) 253-3551 Fax (617) 253-9845