

COP28 DIGEST: RELEVANCE OF KEY OUTCOMES FOR CARBON MARKET IMPLEMENTATION IN AFRICA

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KEY MESSAGES

- COP28 failed to agree on remaining elements for operationalising the Article 6 rulebook. These need to be resolved at COP29 to enable the full establishment of all participation requirements such as authorising ITMOs, establishing registries, and performing corresponding adjustments. Renewed failure to advance multilateral rules would severely undermine confidence in Article 6-backed carbon markets by all stakeholders.
- The Article 6.4 Supervisory Body has made substantial progress towards developing regulatory standards for operationalising the new UN mechanism, which became effective in January 2024. Despite the delay in negotiations on Article 6.4 rules, the transition of CDM activities to the Article 6.4 mechanism can thus move forward. Africa has a substantial share of transition requests, and can use these as a fast-start of the new mechanism, building on hard-won achievements made in the CDM.
- Somewhat ironically, as the CMA failed to adopt the guidance on Article 6.4 methodologies and removals, no new Article 6.4 activities can be submitted for registration until the guidance is adopted at COP29. This means that the initial Article 6.4 activity pipeline will be comprised of existing CDM activities that have met all transition requirements, while new activities need to wait for Parties to agree on the methodology guidance.
- As in recent years, COP28 saw a flurry of implementation initiatives which complement UNFCCC negotiations. However, at least regarding initiatives that have been announced at previous COPs, the progress that can be observed has been sobering. Still, there is a lot of potential for carbon markets to support prominent efforts for nature protection and just energy transitions. Overall interest in carbon markets is high, but the political will to meaningfully accelerate implementation at the scale needed remains elusive.
- Many African countries continue to dedicate significant efforts to Article 6 host country readiness, which can proceed regardless of the delays in UNFCCC negotiations: bilateral cooperation, domestic regulations, and elaborating new priorities such as benefit sharing are sovereign prerogatives that require significant attention and only partially depend on UN rules.



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LIST OF ACRONYMS

A6.4ER	Article 6.4 emission reductions
A6.4SB	Article 6.4 Supervisory Body
ACMI	Africa Carbon Markets Initiative
AEF	Agreed Electronic Format
AGN	African Group of Negotiators
BTR	Biennial Transparency Reports
CCP	Core Carbon Principles
CDM	Clean Development Mechanism
CER	Certified Emission Reductions
CMA	Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement
CMP	Meeting of the Parties to the Kyoto Protocol
DOEs	Designated Operational Entities under the CDM
EBRD	European Bank for Reconstruction and Development
ETA	Energy Transition Accelerator
EU	European Union
GGGI	Global Green Growth Institute
GST	Global Stocktake
ICVCM	Integrity Council for the Voluntary Carbon Market
IPLC	Indigenous Peoples and Local Communities
ITMO	Internationally Transferred Mitigation Outcomes
JCM	Joint Crediting Mechanism
JETP	Just Energy Transition Partnerships
L&D	Loss and Damage
LTS	Long-Term Low Greenhouse Gas Development Strategy
MAC	Mangrove Alliance for Climate
MCU	Mitigation Contribution Unit
MWP	Mitigation Ambition and Implementation Work Programme
NBS	Nature-based Solutions
NCQG	New Collective Quantitative Goal
NDC	Nationally Determined Contribution
NGO	Non-Governmental Organisation
OPEC	Organization of the Petroleum Exporting Countries
PA	Paris Agreement
PACM	Paris Agreement Crediting Mechanism
PoA	Programme of Activities
SBTi	Science Based Targets initiative
SSJW	Sharm el-Sheikh joint work on implementation of climate action on agriculture and food security
TER	Technical Expert Review
UAE	United Arab Emirates
UNFCCC	United Nations Framework Convention on Climate Change
VCMI	Voluntary Carbon Markets Integrity Initiative

1. INTRODUCTION

The key deliverable for COP28 was the first Global Stocktake (GST), which assesses the collective progress towards achieving the goals of the Paris Agreement (PA). Moreover, the establishment of the Loss and Damage (L&D) Fund was another headline-grabbing outcome of the negotiations. On Article 6, however, the further elaboration on rules for global carbon markets was a less prominent part of the COP agenda. Even though the open issues were largely seen as rather technical, Parties failed to forge consensus. This delays the finalisation of the Article 6 rulebook by at least one year, extending remaining uncertainties among market participants. While carbon market implementation is theoretically not prevented by the failure to compromise on vital Article 6.2 and 6.4 elements, the lack of multilateral agreement places a significant burden on both governments and project developers. Therefore, resolving these differences at COP29 is essential for the pace and scale that is needed for market mechanisms to serve as instrument for raising the level of mitigation ambition.

Moreover, COP28's 'action agenda' saw a flurry of new initiatives and updates to those announced at previous COPs, many of which are relevant to carbon market implementation. Yet, substantial progress of previously announced initiatives was rather meagre, at least compared to the urgency of accelerating the pace of implementing necessary steps to close the ambition gap.

The **key objective of this paper** is to analyse what key COP outcomes mean for the practical implementation of carbon markets, with a special focus on the relevance for African host countries. This includes a summary of the regulatory progress within the United Nations Framework Convention on Climate Change (UNFCCC) negotiations as well as the Article 6.4 Supervisory Body (A6.4SB), but also progress on the action agenda. Both aspects will not be analysed from the perspective of a negotiator, but to what extent they are relevant for the practical implementation of carbon markets. **The paper proceeds as follows:** Section 2 comprises COP28 outcomes and assesses the negotiation results taking into account African priorities. Section 3 complements negotiation results by looking at progress made through 2024 at the level of the A6.4SB, bilateral cooperation and host country readiness. Section 4 focuses on the relevance of implementation initiatives announced at COP28, which are relevant for carbon markets such as Just Energy Transition Partnerships (JETP), followed by an outlook towards COP29 (section 5).

2. COP28 OUTCOMES: ASSESSING ARTICLE 6 NEGOTIATION DEVELOPMENTS

2.1. KEY COP28 OUTCOMES

This section summarises key COP28 outcomes beyond Article 6, which will be discussed in detail in the following sections. The conference started with **a surprise decision on the first day to establish a L&D Fund**, with eligibility for all developing countries. The World Bank was chosen as interim trustee for four years, based on a compromise to fulfil certain conditions (UNDP 2024). Initial pledges totalled over USD 700 million, which is far less than what is needed, but enough to start operationalising the Fund (UNFCCC 2023f). UNDRR and UNOPS will jointly host the Santiago Network secretariat which is responsible for the Fund (UNOPS 2023).

The key output of COP28 was the **first GST, which assesses collective progress towards the long-term objectives of the Paris Agreement (PA)** and is also intended to generate a signal for future ambition increases of Parties' Nationally Determined Contributions (NDCs). The GST finds clearly that there is a collective shortfall in achieving the Paris Agreement's goals for mitigation, adaptation, and means of implementation, in particular finance. The GST stresses the relevance of IPCC assessments, which find that global temperature rise is projected to be around 2.1 - 2.8 °C if current NDCs will be achieved. Thus, an implementation gap persists, and achieving the 1.5 °C target requires further substantial emission reductions. Mitigation actions are outlined with qualifiers emphasising national determination and accelerating efforts. Specifically, the GST calls for tripling renewables and doubling energy efficiency by 2030, transitioning away from unabated coal-fired power generation, and phasing out inefficient fossil fuel subsidies (UNFCCC 2023f).

The GST negotiations were highly contested, with OPEC nations pushing for a continued role of fossil fuels, while others advocated for remaining committed to the 1.5°C target. Compromise was achieved through a formulation that did not call for a phase-out, but a "transition away from fossil fuels in energy systems" (UNFCCC 2023l). While the overall GST outcome was broadly welcomed, it remains to be seen whether it will lead to deeper mitigation actions and for Parties to update their NDCs in line with 1.5 °C compatible emission pathways. Yet, this is unlikely to have a short-term impact on carbon market implementation, even though market mechanisms are intended to serve as policy instruments for increasing mitigation ambition. Indirectly, however, there may be stronger ITMO demand if countries take the GST's key messages seriously and are willing to increase their NDC mitigation targets in 2025.

On finance, the key focus was to make progress towards defining a **new collective, quantified goal (NCQG) for providing climate finance to developing countries**. The 2020 target of mobilising USD 100 billion annually remains elusive, and there is a widening gap between developing countries' needs and the support provided for adaptation, prompting calls for financial architecture reforms and increased climate finance through grants and concessional instruments. The estimated needs for the pre-2030 period stand at USD 5.8 - 5.9 trillion, emphasising the urgency for action (UNFCCC 2023j). Discussions focused on structure

and time frame of the NCQG, finance volume, sources of funding, and transparency arrangements. Yet, little substantial progress was made, although there is clear expectation for COP29 to deliver the new finance goal. Given that carbon markets are seen as a key instrument in mobilising finance, there could be an increasing attention on how carbon market finance may be counted towards international climate finance goals.

2.2. ARTICLE 6.2 NEGOTIATIONS

Despite high expectations, COP28 concluded without an agreement on the Article (Art.) 6.2 decision text. This was due to a stark divide between Parties advocating for detailed guidance on the Art. 6.2 rules established at COP26, and those favouring only minimal guidance.

Central to the discussions on Art. 6.2 at COP28 was the **definition and scope of cooperative approaches**. There was a division among Parties on whether definitions for these approaches were necessary and, if so, whether they should encompass only bilateral and multilateral initiatives – as endorsed by the African Group of Negotiators (AGN) – or also include unilateral approaches. Some Parties viewed the call for clear definitions as overly restrictive and outside the scope of their given mandates. However, other Parties highlighted the significance of such definitions for achieving transparency and coherence within authorisation, reporting, and review processes. The substantial resistance against defining the scope of cooperative approaches contributed considerably to the overall failure to agree on an Art. 6.2 decision text and will likely remain a considerable challenge.

The discussion on **authorisation of ITMOs** was highly contentious and included debates over the definition of **different types of authorisation**, namely of cooperative approaches, Internationally Transferred Mitigation Outcomes (ITMOs), entities, or systems. Authorisation discussions also **included, the timing of these authorisations** (particularly of ITMOs), **minimum content requirements**, and **procedures for changes to and/or revocation of authorisations**. These discussions underscored the difficulty in standardising authorisation processes across different legislative systems due to the sovereign right of host Parties to authorise. For instance, some Parties called for separate authorisation processes for different types of authorisations, whereas others preferred a single consolidated authorisation process owing to their legislative set-up. In the case of minimum content requirements, the proposals included a standardised mandatory form for the content of the authorisation of cooperative approaches and ITMOs, or instead, a voluntary template. Parties were also unable to converge on changes to authorisations. A few Parties argued that a host country should have the right to revoke authorisations, or to make changes to authorised ITMOs use cases at any time, while many Parties (including the AGN) opposed any changes of authorisation post-transfer of ITMOs due to implications on accounting and reporting, thereby endangering the integrity of Art. 6.2 cooperative approaches. Revocation, which is generally understood as “changes after the first transfer of ITMOs”, was not referenced in the final text. These discussions were also linked to the discussions on authorisation within Art. 6.4 negotiations.

Regarding **reporting and review**, several Parties, including the AGN, hoped for the finalisation of the Agreed Electronic Format (AEF). There was general agreement on a structure

comprising four tables to facilitate information submission, yet the final draft text did not endorse any options due to diverging opinions on what a cooperative approach means and whether authorisation should be a single consolidated process or be differentiated into different types. The final draft merely encourages Parties to continue testing the draft AEF, which could risk the progress made throughout 2023. Moreover, questions about the sequencing and timing of the Art. 6 Technical Expert Review (TER) and the submission of the AEF, identifying and correcting inconsistencies, and reviewing confidential information, all of which were AGN priorities at this COP, remained unresolved, reflecting broader challenges in establishing a robust and transparent reporting and review framework under Art. 6.2.

Discussions on the **infrastructure for tracking ITMOs** highlighted main points of contention regarding a) the nature of the registries — whether they should function as transactional registries (i.e., ability to undertake transactions of ITMOs) or merely for “pulling and viewing” information from underlying registries — and b) how registries should connect with each other (transactional versus non-transactional connection). The treatment of Art. 6.4 emission reductions (A6.4ERs) in the international registry was also discussed. Some Parties proposed transacting ITMOs through both national registries and the international registry to support their domestic carbon market service providers. Conversely, others were cautious of allowing private entities (such as independent crediting standards), which might have conflicts of interest, to assume official functions.

Other topics where Parties showed an inability to converge included defining common nomenclature, i.e. specific information attributes pertaining to cooperative approaches (e.g. authorising and using entities, additional information in the unique identifier, activity types, etc.) and the application of the first transfer regarding ITMOs. Concerning the latter, Parties supported the application of one consistent definition across any cooperative approach, while other Parties supported the consistent application of an agreed first transfer definition within a cooperative approach, but with possibilities of differentiated definitions between cooperative approaches. The final decision on this agenda item will have implications for the structure of the AEF.

Implications of the Art. 6.2 negotiations failure

The practical implications of failing to resolve Art. 6.2 technical issues are significant. Overall, Art. 6.2 cooperation can still proceed since Parties are not prevented from participating in cooperative approaches and developing their own domestic or bilateral procedures. However, in the absence of agreed multilateral guidance and rules, participating Parties will need to negotiate details on a case-by-case basis, which increases transaction costs. For African countries which have entered into bilateral agreements (see Chapter 4.2), this is a major concern as it complicates the establishment of their domestic procedures and increases capacity building needs. In addition, these differentiated practices and disparities between cooperative approaches could potentially compromise the environmental and social integrity of these approaches, decreasing public trust in carbon markets.

One of the main factors contributing to the risk of fragmented practices is the absence of agreed rules regarding authorisation. For example, for managing changes to authorisations

(for cooperative approaches, ITMOs, and entities), some Parties, including Ghana, have called for an “initial authorisation” from the buyer which would provide investment security to project developers. This would also allow buyers to assess the quality of the mitigation outcomes generated in the cooperative approach before acquiring them, ensuring that the activity has complied with human rights or has established appropriate environmental and social safeguards. Consequently, some Parties may continue to advocate for reserving the right to change the initial authorisation until the latest point possible (preferably before the generation of the mitigation outcomes). The lack of uniform guidance regarding authorisation also amplifies risk for activity developers seeking authorisation, who must navigate the unique requirements of each host country.

The hesitation to define what constitutes a cooperative approach is unlikely to deter parties from engaging in such cooperation. In fact, it grants them greater flexibility, e.g. to incorporate unilateral approaches. Unilateral approaches would enable Parties to endorse credits from mechanisms not covered by bilateral or plurilateral agreements, such as those from the voluntary carbon market (VCM) which may be negotiated between host countries and private actors. This may raise transparency and coherence concerns in the reporting and reviewing process, since only Parties are required to track and report their activities under Art. 6.2. If unilateral approaches were suddenly allowed, they require a minimum level of rules to promote robust accounting, reporting, and other quality standards.

The **lack of a standardised reporting framework** also poses some challenges, risking progress made throughout 2023. With the current status of negotiations, Parties who have commenced their reporting process, such as Ghana and Switzerland, need to develop their own reporting formats. The uncertainty regarding the content and timing of the reports’ submission could lead to practices that undermine transparency, comparability, consistency, and completeness – particularly on how Parties report ITMO-related authorisations and transactions and whether they wait for experts to review their initial reports before submitting required annual information. However, this lack of additional guidance also leaves Parties with the opportunities to experiment and bring up their experiences during negotiations, pushing for procedures that align more with their practical experiences.

Lastly, the **postponement in finalising functionalities for the international registry**, initially scheduled for roll out on December 2024 (UNFCCC 2023m), may impose more disadvantages for countries without national registries. The latter is the case of many African countries who do not have their own national registry and have plans for using the international registry to track their ITMO transfers. A delay in the operationalisation of the international registry increases the risk of countries falling behind in the implementation of Art. 6.2 activities.

2.3. ARTICLE 6.4 NEGOTIATIONS

Key objectives for Art. 6.4 negotiations were two-fold: first, as the Art. 6.4 mechanism operates under the authority of the Conference of the Parties serving as the Meeting of the Parties to the Paris Agreement (CMA), Parties need to approve key regulatory decisions made by the Article 6.4 Supervisory Body (Art. 6.4SB), which oversees the operations of the mechanism.

Moreover, important elements of the Art. 6.4 rulebook required further elaboration by negotiators, including on authorisation, reporting, and registries. Throughout 2023, the A6.4SB made significant progress by developing and approving numerous regulatory standards and procedures, including recommendations for methodologies and removals, edging the Art. 6.4 Mechanism – recently relabelled the **Paris Agreement Crediting Mechanism (PACM)** by the UNFCCC Secretariat – closer to full operationalisation (see section 4.1). Nevertheless, the A6.4SB's recommendations, particularly regarding the development of **recommendations for methodologies requirements and removals activities**, sparked considerable debate at COP28. Consequently, the conference concluded without achieving consensus on decisions for Art. 6.4.

The recommendations for [activities involving removals under the Art. 6.4 mechanism](#) (UNFCCC 2023d) faced widespread scrutiny, with concerns raised about permanence, categorisation of reversal risks, post-crediting period monitoring, buffer pool composition, and the absence of provisions on environmental and social safeguards as well as human rights. These concerns were amplified by Non-Governmental Organisations (NGOs), particularly regarding the risks associated with forestry-related removal projects. As a result, several Parties vehemently opposed adopting the recommendations for removal activities. On the recommendations for [requirements for the development and assessment of Art. 6.4 mechanism methodologies](#) (UNFCCC 2023c), opinions were divided: while some Parties sought to dilute the requirements for baseline downward adjustment and its alignment with the Paris Agreement's long-term goals, others emphasised principles such as enhancing ambition over time, promoting equitable sharing of mitigation outcomes, and ensuring additionality. Despite extensive discussions, several issues remained unresolved, including the definition of technological lock-in, identification of transformative activities, and alignment with the Paris Agreement's long-term objectives. Despite these challenges, the recommendations for methodology requirements garnered widespread consensus. In fact, some Parties advocated for advancing exclusively with the adoption of the methodology recommendations, perceiving them as a robust groundwork for future endeavours. However, resistance surfaced against adopting or implementing recommendations individually, with a preference for viewing both documents as an interconnected package. The contentious debates surrounding the recommendations for activities involving removals, coupled with the resultant lack of consensus to adopt them, ultimately prevented adopting any of the recommendations for the Art. 6.4 mechanism.

Regarding **ITMO authorisations**, the discussions mirrored those under Art. 6.2, with similar debates on the timing, content, changes to, and revocation of authorisations. In the case of activities implemented through the Art. 6.4 mechanism, the AGN voiced concerns over the timing of providing authorisation statements. They argued that the provision of the authorisation statement to the A6.4SB by the host Party at 'approval' of an Art. 6.4 activity was inconsistent with prior decisions. Although many Parties agreed with this proposal, other Parties called for authorisation statements to be as early as possible in the activity cycle. After many iterations, the final draft text only encourages Host Parties to provide authorisation statements to the A6.4SB no later than at issuance of the Art. 6.4 emission reductions (A6.4ERs). In the case of already issued A6.4ERs, the timing of authorisation should be prior to any transaction in the mechanism or transfers out of the mechanism registry. Moving forward, Parties

agreed to address key authorisation aspects under Art. 6.2 and cross-reference them in the Art. 6.4 text. However, the lack of consensus on this topic under Art. 6.2 resulted in this issue remaining unresolved under Art. 6.4.

Regarding **registry types**, negotiations also echoed those under Art. 6.2, debating whether to allow registries only for data viewing or enabling ITMO transfers (which is supported by the AGN). The latter also influenced discussions on how to connect the mechanism registry, the international registry, and Party registries. Clarity on this topic remained absent, as does a clear indication of whether only authorised A6.4ERs (ITMOs) can be transferred to participating Parties' registries that request this connection. This ambiguity suggests the possibility that non-authorised A6.4ERs – also called Mitigation Contribution Units (MCU) – could be transferred to Party registries, which is an action many Parties previously opposed.

Before COP28, most Parties considered **emission avoidance and conservation enhancement activities** ineligible under the PACM, citing the absence of agreed scientific definitions. Despite this, the issue was still included in the agenda, with Parties nearing consensus at COP28 before ultimately postponing the decision to CMA10 in 2028 in the final draft text, highlighting the ongoing uncertainty regarding the eligibility of such activities.

Implications of the COP28 negotiations failure

The delay in finalising a decision on Art. 6.4 not only impedes the full operationalisation of the PACM but also its capacity to facilitate high-integrity carbon market transactions, which are vital for achieving global emission reduction targets under the Paris Agreement. This is particularly relevant for African countries that do not have bilateral cooperation agreements with the few sovereign buyers currently engaging in Art. 6 implementation. Moreover, the PACM – like its predecessor the Clean Development Mechanism (CDM) and independent crediting standards – allows host Parties to make use of the mechanism activity cycle and support structure, which eases national capacity requirements compared to bilateral approaches.

The A6.4SB is tasked with revising methodology requirements and removals guidance for another year, resulting in uncertain prioritisation and timelines for future tools. **This delay means that the A6.4SB cannot approve any new methodologies until the recommendations are adopted, which could be at COP29 at the earliest.** Activity developers will face an additional year's wait for methodology approval, delaying the implementation of mitigation activities that can generate A6.4ERs. Project developers can still submit methodologies for consideration, with the understanding that adjustments may be necessary once final recommendations are adopted. These delays also present African countries with more challenges that are currently preparing their domestic procedures for enabling the private sector to engage in Art. 6.4 mechanism, and particularly determining which activities are eligible under the PACM.

Other unresolved issues regarding the registries' connection such as the ambiguity surrounding the transfer of authorised A6.4ERs, the definition of 'participating Party registries', still need to be solved to create an environmentally sound international crediting mechanism.

The ongoing uncertainty from the failure to agree on Art. 6.2 and 6.4 underlines the need for clear international guidelines to foster a coherent and effective global carbon market, thereby ensuring that carbon markets contribute meaningfully to climate and sustainable development objectives, and direct finance to where it is most needed. Having said that, the determination with which the A6.4SB and UNFCCC secretariat are advancing A6.4 regulatory standards indicate that the mechanism will be fully operational soon (see section 3.1).

2.4. ARTICLE 6.8 NEGOTIATIONS – HOW TO MAKE THE WORK PROGRAMME TANGIBLE?

Art. 6.8 is the only Art. 6 negotiations item that produced a result in Dubai. In the run-up to COP28, the Glasgow Committee for Non-Market-Based Approaches (GCNMA) organised numerous contact groups, a consultation with Convention and Paris Agreement bodies, and a workshop during which certain initiatives and Parties presented potential non-market-based approaches that can successfully achieve the objectives of the Art. 6.8.

Key elements from the GCNMA decision adopted in Dubai include that the Committee continues implementing the first phase of the **work programme** (2023–2024), which focuses on identifying all relevant work programme activities and operationalising the **UNFCCC web-based platform**. Interested Parties are invited to notify the secretariat of their **national focal points for Art. 6.8** to enable them to access the UNFCCC web-based platform. The secretariat is requested to develop the UNFCCC web-based platform and fully operationalise it as soon as possible, ahead of the 5th meeting of the GCNMA in June 2024. Parties and other relevant actors are invited to provide information on financial, technology, and capacity-building support for identifying, developing or implementing non-market approaches on the platform. The secretariat is requested to develop a manual on submitting and recording information on the web-based platform.

The secretariat will prepare reports on upcoming submissions by Parties and observers, the workshop held in Dubai on joint mitigation and adaptation approaches referred to in Art. 5.2 and others, and organise an in-session workshop during the 5th meeting of the GCNMA. The SBSTA Chair is requested to invite Parties and relevant actors to exchange views on financial, technology, and capacity building support for identifying and developing non-market approaches, including on enhancing access to various types of support, identifying investment opportunities and actionable solutions that support NDCs.

2.5. CMP RESULTS: WRAPPING UP THE CDM

Less prominently than GST and Art. 6 negotiations, COP28 also saw the 18th session of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP), where further guidance relating to the Clean Development Mechanism (CDM) was adopted. The decision text emphasised the importance of a seamless transition from the CDM to the PACM and highlights key impacts of the CDM. These include 7,840 project activities and 353 programmes of activities (PoAs), and over 2.42 billion Certified Emission Reductions (CERs) issued, out of which more than 389 million had been voluntarily cancelled in national registries

or in the CDM registry itself (UNFCCC 2023g). This means that at least 16 % of total CERs globally have not been used to offset developed country emissions.

The text also recognised that, since the 118th meeting of the CDM Executive Board, registrations, issuances, and renewals of project activities and/or programmes of activities under the CDM are not technically feasible anymore (UNFCCC 2023i), effectively ending the operations of the CDM. Similarly, deliberations on the operation of the CDM's processes and institutions will continue at COP29, aiming to ensure no operational gap between the end of the CDM infrastructure and the activation of new Art. 6.4 registry. The UNFCCC secretariat will prepare technical papers on the necessary operations of the CDM registry (handling remaining CERs within the registry), as well as the required resources for the operation of the CDM institutions.

As the PACM moves towards operationalisation, an orderly transition from the CDM requires resolving technical questions relating to the CDM described above. Hence, the CMP decision is a welcome step towards ending the CDM and further advance the selective transition of activities, credits, and infrastructure to the new mechanism, in line with A6.4 rules. Further work is required which the secretariat has been mandated to elaborate in technical papers.

3. PROGRESS MADE TOWARDS ARTICLE 6 IMPLEMENTATION

3.1. OPERATIONALISING THE ARTICLE 6.4 MECHANISM

3.1.1. Regulatory progress made by the Article 6.4 Supervisory Body ahead of COP28

Despite the failure to provide new guidance from COP28 for the A6.4SB, many operational aspects of the PACM progressed significantly through regulatory progress made during 2024, which was not subject to approval from the CMA. As of January 2024, several critical PACM standards and procedures have become effective (see Box 1), which comprise a substantial share of what is needed for rolling out the new mechanism.

Box 1: A6.4SB regulatory standards in effect

1. [Accreditation Standard](#)
2. [Accreditation Procedure](#)
3. [Activity Cycle Standard for Projects](#)
4. [Activity Cycle Procedure for Projects](#)
5. [Validation and verification standard for projects](#)
6. **Standard:** [Transition of CDM activities to the Article 6.4 mechanism](#)
7. **Procedure:** [Transition of CDM activities to the Article 6.4 mechanism](#)

Moreover, early in 2024 the Supervisory Body launched the **Prior Consideration Notification Form**¹ for activity participants to initiate the process of indicating an A6.4 activity idea. Activity proponents are required to demonstrate the consideration of the PACM in their decision-making process before commencing project implementation. Prior consideration was also used in the CDM as a first step in demonstrating project additionality. Therefore, introducing this requirement ahead of the full operationalisation of the new mechanism can be interpreted as an effort by the secretariat to build momentum by developing a pipeline of activities, and to start engaging with interested stakeholders.

Other procedures adopted by the A6.4SB during 2023 have not yet become effective as their application is subject to the approval of **recommendations for requirements for Art. 6.4 methodologies and removals activities**. These include the procedures related to the development, revision, clarification, and update of methodologies, methodological tools, and standardised baselines (UNFCCC 2023k). Consequently, new activities cannot yet apply to register under the PACM, as they depend on approved new A6.4 methodologies which can only be developed once the methodology guidance is adopted.

Since COP28, the A6.4SB held its **10th meeting** (SB010) from 26 February to 1 March 2024. There was wide agreement that the A6.4SB's main objective for 2024 is to operationalise the PACM by **putting in place the standards, guidelines, and tools** necessary for approving new methodologies and registration of activities (UNFCCC 2024a). For this purpose, a call for inputs to understand the concerns raised by parties at CMA5 in 2023 was opened. In addition, other tools and procedures were discussed, including the **Sustainable Development Tool**,

¹ Prior Notification Form: Article 6.4 Mechanism Prior consideration notification form for projects (A6.4-FORM-AC-002) V01.0 (office.com).

the **Grievance and Appeal Mechanism, different methodological products²**, and the **mechanism registry**, which is slated to be operational by September 2024. In the meantime, the secretariat will prepare a draft procedure that specifies how the registry will enable accounts for holding and transferring carbon credits, as well as options for a fee structure for secondary transfers to cover the costs of operating the registry (UNFCCC 2024a). Overall, progress achieved so far shows that PACM is getting ready for implementation and there is a strong push for operationalisation by the UNFCCC Secretariat. For African host parties, engaging in the new mechanism has significant advantages as many of the activity cycle oversight functions are taken over by the A6.4SB and the support structure in the UNFCCC secretariat. This reduces the need to build domestic capacity which is often scarce and highly specialised.

3.1.2. Managing the transition from CDM to the Paris Agreement Crediting Mechanism

A crucial aspect of rolling out the PACM is CDM transition as these activities are already being implemented. The formal deadline to request submissions from project participants was 31 December 2023. 1266 project activities (PAs) and 113 PoAs including additional CPAs specifically requested the transition to the PACM (UNEP CCC 2024). Those activities have the potential to generate more than 900 million carbon credits based on CDM methodologies which are valid until 2025. The majority of requests have been done for wind, energy efficiency households, hydro, and solar activities in China (549 requests), followed by India (458 requests) (UNEP CCC 2024). There are 585 transition requests from Africa, with Eastern Africa being the leading subregion, followed by West Africa (see Figure 1).

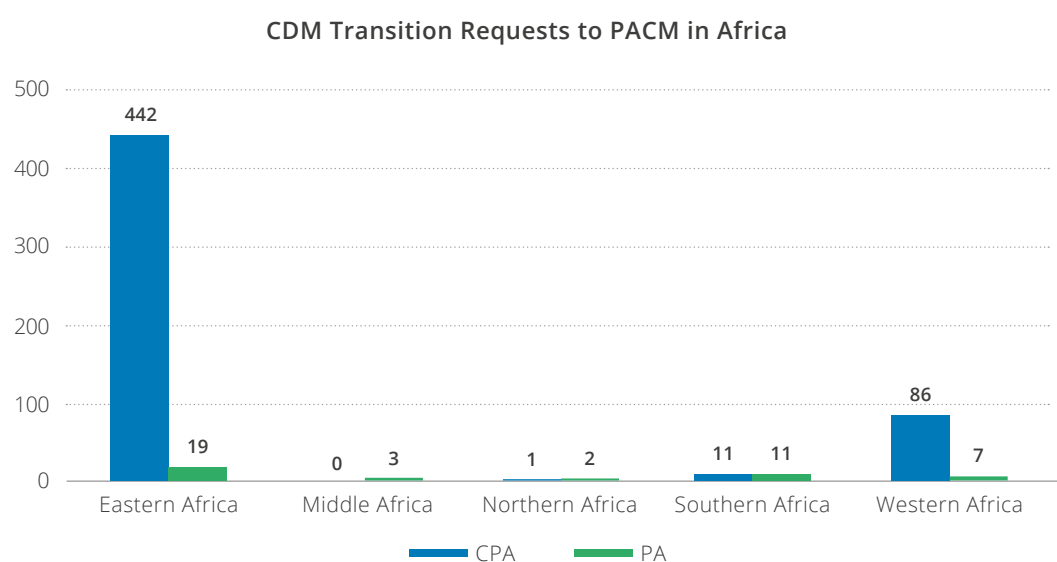


Figure 1: Requests for transition of African CDM activities to PACM

Source: Authors based on UNEP CCC 2024.

² These include, among others, baseline tools, standard/tool/guidance on downward adjustment, tool on suppressed demand, guidance on standardised baselines, guidance, and tools on additionality, leakage tool, monitoring and reporting related products, guidance related to SB responses to activity failure, reversal risk assessment tool, reversal compensation measures.

The host country approval of these transition requests needs to take place by 31 December 2025. Once this has been achieved, several steps need to be taken until the activity will complete the transition process by registering under the PACM (see Box 2).

Box 2: Overview of the procedure for transition from CDM to PACM

1. The CDM transition procedure requires **stakeholder consultations** within 28 days of publication. **Host country approval** is required at the latest by 31 December 2025.
 2. Once the approval is submitted by the host party to the secretariat, it will be **published on the UNFCCC website** and will also be sent to the project participants.
 3. If project participants continue to apply CDM methodologies, they must submit **additional documentation** within 180 days of host Party approval to demonstrate their compliance with additional requirements for registration under the PACM.
 4. The UNFCCC secretariat will request a **transition fee** upon receipt of the additional documentation. Once this payment is received, the **completeness check** by the secretariat will start and shall be completed within seven days of its commencement.
 5. Upon positive conclusion of the completeness check, the secretariat shall commence the **substantive check** within 21 days of its commencement.
 6. Upon conclusion of the substantive check, the secretariat shall communicate the completion on the UNFCCC website and notify the host Party and the Supervisory Body to initiate the **review process, that can be made** by the host Party of the transitioning CDM project activity or PoA, or any member or alternate member of the Supervisory Body within 28 days of the substantive check.
 7. If no review of the request for transition is requested by the deadline referred above, the A6.4 registration of the activity shall be **deemed approved by the Supervisory Body**.
- Source: UNFCCC4c.

Since the PACM methodology guidance is expected to be approved at COP29 in November 2024 at the earliest, the first registration of new activities under PACM cannot happen earlier than 2025. However, transitioned CDM activities can already be registered under the PACM earlier, as they can continue to use CDM methodologies until 2025. Therefore, the transition can serve as a fast start of the PACM for African host countries with existing CDM activities that have requested transition. This is particularly relevant for Eastern and West Africa where a high share of existing activities have requested their transition to the new mechanism (see Chapter 4.1.2). However, the first issuances of A6.ERs from transitioned CDM activities may be delayed until 2025 due to various outstanding gaps. For instance, issuance rules for A6.4ERs are not yet available (as they are not included in the activity standard), and the mechanism registry is not yet operational, preventing these A6.4ERs from being issued since that would require access to the registry and dedicated accounts for activity developers. Crucially, once PoAs have fully transitioned and new methodologies become available, these existing programmes can also be scaled up further.

SB010 also addressed revisions of CDM methodologies and tools, with a focus on the most relevant activity types, including grid-connected electricity generation from renewable sources, thermal energy production; landfill gas flaring or use, and clean cooking. In addition, the CDM transition standard empowers CDM designated operational entities (DOEs) to verify requests

for issuance from transitioned activities until 30 September 2025. Additionally, CDM DOEs are allowed to apply for initial PACM accreditation assessments starting 1 April 2024. During SB010, all thirty existing CDM DOEs expressed readiness to verify and certify requests for issuance of transitioned activities to the PACM, with the A6.4SB agreeing to publish their names on the PACM website.

As a result, despite the hiccups in finalising technical Art. 6.4 negotiations, regulatory standards and steps taken by the A6.4SB as well as the UNFCCC secretariat are further advancing the mechanism towards full operationalisation. Therefore, African countries can begin to prepare for engaging in the mechanism by focusing immediately on evaluating transition requests of existing activities, while also scoping opportunities for new activities in anticipation of the finalisation of the methodology guidance during COP29.

3.2. BILATERAL COOPERATION

Similarly to progress made on the PACM, bilateral carbon market cooperation has also been advancing despite the delays in Art. 6.2 negotiations. There has been an increasing number of bilateral agreements, including with African countries. Moreover, buyers and many host countries have initiated national requirements for Art. 6 participation, encompassing infrastructure for NDC accounting and reporting, as well as processes for activity approval and ITMO authorisation. However, apart from a select few initiatives, the practical implementation of Art. 6 cooperation remains in its early stages, and the overall volume of transactions globally remains marginal. Several factors contribute to this, including ongoing questions regarding UNFCCC regulations, the delay in operationalising the new multilateral mechanism, incomplete national legislation in host countries, and limited demand from buyer country NDCs. Still, there are now 80 bilateral agreements (21 involving African countries) between 8 distinct buyers and 46 host countries. A combined total of 140 Art. 6 pilot activities have been documented, with 119 attributed to Japan's Joint Crediting Mechanism (JCM). Out of these, only 4 have received host country authorisation statements³ from Ghana, Thailand, and Vanuatu – which have also submitted initial reports to the UNFCCC.

On December 15, 2023, the first issuance of 1,916 ITMOs (Internationally Transferred Mitigation Outcomes) took place for an e-bus programme in Bangkok, covering the period from October to December 2022. This transaction between Thailand and Switzerland marks the first ITMO transaction under Art. 6.2 of the Paris Agreement (see Hoch et al. 2023 for more detailed data).

³ Authorisation statements under Art. 6.2 of the Paris Agreement are official declarations issued by the relevant national authorities of participating countries. These statements signify the approval or authorisation of specific pilot projects or activities that aim to achieve emission reductions or other mitigation outcomes. The authorisation confirms that the project meets the requirements and criteria set forth in the national regulations or guidelines of the participating countries.

3.3. HOST COUNTRY READINESS

Enhancing host country readiness is crucial for achieving significant mitigation outcomes and providing benefits to domestic stakeholders involved in Art. 6 transactions. Countries hosting Art. 6 activities are currently gearing up to translate the Art. 6 rulebook into national institutional frameworks and carbon market infrastructure such as registries (Hoch et al. 2023). Host countries' domestic frameworks need to build on multilateral rules for Art. 6.2 and Art. 6.4, but even more importantly need to be aligned with national institutional responsibilities, specific NDC features, and sectoral policies.

Africa is at the forefront of Art. 6 readiness. Even though only few countries such as Ghana, Kenya, and Zimbabwe have passed carbon market legislation, many others are in the process of strengthening their strategies and readiness to engage in Art. 6-backed carbon markets. A significant number have taken steps by establishing inter-ministerial task forces and DNAs, although a considerable number have yet to designate institutions responsible for Art. 6. Domestic frameworks typically also cover VCM activities (Hoch et al. 2023). Despite these efforts, many countries are still in the initial phases of preparing for Art. 6 implementation and may require additional capacity building and assistance.

A specific readiness priority that has been affected by the Art. 6 negotiations failure at COP28 is the establishment of domestic procedures for Art. 6 activity approval and ITMO authorisation. This is crucial to improve certainty of project developers and investors of what type of activities countries intend to support. Some countries have defined eligibility criteria, and are working on positive lists of activities or sectors eligible for Art. 6, or in some cases also negative lists activity types that will not be approved. Some countries have adopted a mixed strategy, defining specific lists of activities.

Benefit-sharing of carbon market revenues has also become increasingly important recently, with countries facing the challenge of striking a balance between their own financial interests and maintaining investor incentives. African countries, particularly Ghana, Kenya and Tanzania, are leading efforts in elaborating benefit-sharing arrangements.

Art. 6 readiness will continue to require a lot of attention from host countries. Moreover, Art. 6 is not a stand-alone instrument but serves to achieve NDC targets. This explains the relevance of having robust processes for authorisation, corresponding adjustments, etc. In 2024, Parties to the Paris Agreement may also submit their first Biennial Transparency Reports (BTR), which are formally due in December 2024, but with some flexibilities for least developed countries (LDCs) and small island developing states (SIDS). Moreover, the next NDC updates are also due in 2025. For both processes, carbon markets are relevant and will be elevated prominently on the agenda of readiness activities.

Article 6 capacity building and implementation

Capacity building programmes continue to provide essential support to countries, helping them to understand and implement Art. 6 by enhancing their institutional capacities, technical expertise, and stakeholder engagement. Presently, host country readiness is a prominent

focus area in Art. 6 implementation, with the top priorities for Art. 6 readiness identified by host countries were (GGGI 2022; Hoch et al. 2023):

- 1. Putting in place legislation and regulations to engage with carbon markets**
- 2. Capacity building/training for government stakeholders**
- 3. Developing a national registry or tracking tool**

We detail host country readiness in a recent study on the landscape of Art. 6 implementation (Hoch et al. 2023). What clearly emerges is that UNFCCC rules on Art. 6.2 and Art. 6.4 as well as national legislation and other rules remain unfinished business. This contributes strongly to remaining uncertainty among market stakeholders about which rules need to be taken into account, what makes a “good” carbon credit, among many other questions. However, given the comprehensive efforts within the negotiations and within countries, these questions will become increasingly clearer as soon as these processes are completed in the next 1-2 years.

4. HOW WILL COP IMPLEMENTATION INITIATIVES IMPACT CARBON MARKETS?

This section summarises progress made on previously announced and new implementation-focused initiatives that are relevant for carbon markets. While the climate negotiations have begun to seek ways to address implementation gaps, e.g. through the Mitigation Ambition and Implementation Work Programme (MWP) agenda item, COP26 also began to elevate complementary implementation-focused initiatives more formally to accelerate progress towards achieving the Paris Agreement goals. Therefore, UNFCCC COPs have come to serve a dual purpose of advancing multilateral rules while also serving as a global platform for initiatives that address critical implementation gaps.

Similarly to COP27 in Egypt, COP28 also saw a flurry of new implementation initiatives as part of an 'action agenda' which the COP Presidency supported as a vital mechanism for building momentum and catalysing action in critical sectors and issue areas. However, progress on previously announced initiatives – at least for those relevant for carbon markets – has so far been sobering.

4.1. IMPLEMENTATION INITIATIVES AT COP28

Nature-based Solutions (NBS), biodiversity, and food systems at COP28

Biodiversity conservation and the linkages between food systems, climate change, and biodiversity loss were elevated more prominently at COP28 than ever before within the climate process. 153 countries (incl. Brazil, China, EU, US) signed the **Emirates Declaration on Sustainable Agriculture, Resilient Food Systems, and Climate Action**. A significant factor in raising the profile of biodiversity at COP28 was the recently agreed **Kunming-Montreal Global Biodiversity Framework** (GBF) to the UNFCCC's sister Convention on Biological Diversity (CBD). This agreement can be seen as the equivalent of the Paris Agreement in the biodiversity space and sets global 2030 and 2050 targets that are likely to generate a direct interplay between climate and biodiversity policies, e.g. the targets to restore 30 % of degraded ecosystems and conserve 30 % of land and water, including marine ecosystems (CBD 2024). This multilateral agreement fuelled efforts to integrate biodiversity considerations more strongly into climate policies and actions, recognising the interconnected nature of climate change and biodiversity conservation. Given the importance of nature in the carbon market landscape, there is a new opportunity of mainstreaming biodiversity impacts into carbon market activities and exploring synergies between biodiversity and carbon finance to support ecosystem restoration while advancing national climate and biodiversity targets.

Voluntary Carbon Markets (VCM)

On the side of COP28, considerable attention was directed towards the VCM, where various events and announcements highlighted efforts to strengthen market integrity. On the supply side, multiple crediting standards have been collaborating on the Core Carbon Principles (CCPs) promoted by the Integrity Council for the Voluntary Carbon Market (ICVCM), which has been established to label high integrity carbon credits. Carbon credit demand issues also received attention through the Science Based Targets Initiative (SBTi), the Voluntary Carbon

Markets Integrity Initiative (VCMI), GHG Protocol, and the 'We Mean Business Coalition', which joined forces to develop a comprehensive, science-based guidance for carbon credit use cases.

A group of like-minded EU countries issued a joint statement on high integrity in the VCM, building on the EU's Call for Action and the G7 principles of High Integrity Carbon Markets. Similarly, the European Union (EU) also hosted a high-level carbon market event, during which European Commission President Ursula von der Leyen highlighted the EU's Call to Action for Paris-Aligned Carbon Markets issued in June 2023. She emphasised the importance of establishing common standards for the VCM, echoing concerns expressed in a leaked internal EU document regarding heavy reliance on existing VCM standards and registries, particularly for ITMOs issued under Art. 6.2.

This combined emphasis on aligning methodologies and establishing common standards underscores the need for African nations, especially as suppliers of carbon credits, to enhance their capacity and governance frameworks to meet international standards. At the same time, there is space for diplomatic cooperation between buyer and seller countries to promote ambition and integrity. Even if the EU as a bloc does not accept international mitigation outcomes for their NDC, the joint statement by several EU member states provides orientation for private sector buyers within their jurisdiction, which should be recognised as a source of demand for African carbon credits.

Africa Carbon Markets Initiative (ACMI)

The Africa Carbon Markets Initiative (ACMI) was launched at COP27 with the promise of catalysing climate action and sustainable development across the African continent through the promotion of carbon markets. ACMI initially promoted extremely ambitious targets to generate annually 300 million carbon credits and 1.5 - 2.5GtCO_{2e} by 2050 from the region. While ACMI generated a lot of attention at COP27, progress made until COP28 has been limited. The United Arab Emirates (UAE) as COP28 Presidency committed to buying 450 million USD worth of carbon credits at the Africa Climate Summit in Nairobi in September 2023. Yet, COP28 did not see any new announcements from buyers or investors related to ACMI, but launched Carbon Market Activation Plans in Ghana, Rwanda, Nigeria, Mozambique, and Malawi. Some critics have been suggesting that the initiative needs to pay more attention to ensuring market integrity and NDC alignment rather than prioritising quantity over quality of carbon credits. Despite these challenges, ACMI is a recent initiative and there is potential that ACMI can address these issues and contribute positively not only to scale but also to the environmental and social integrity of African carbon market engagement.

Energy Transition Accelerator (ETA)

The ETA is a partnership between the U.S. Department of State, the Bezos Earth Fund, and the Rockefeller Foundation, which was also announced at COP27. The key idea is to use voluntary carbon markets to support the energy transition in emerging economies. Through the "Energy Transition Accelerator" (ETA) project, launching formally on Earth Day in April 2024, the initiative aims to use the voluntary carbon market to drive this transition, stressing the need for robust oversight. Own projections suggest the ETA could mobilise between USD 72 billion to USD 207 billion by 2035 (USDS 2023), with support from host governments like Chile,

the Dominican Republic, and Nigeria, and interest from corporations such as Bank of America, Mastercard, Standard Chartered Bank, and McDonald's.

The ETA's voluntary approach initially focuses on energy transition in particular in emerging Asian economies, e.g. by addressing funding constraints for early coal retirement (Larasati and Mafira 2023). Moreover, the ETA has been exploring partnerships with the World Bank and other carbon market stakeholders. Overall, while some new announcements on the ETA's design have been made, there is not yet information available on concrete activities and investments.

4.2. A MISSING LINK: CARBON MARKETS AND JUST ENERGY TRANSITION PARTNERSHIPS REMAIN DISCONNECTED

Among the most significant implementation initiatives are Just Energy Transition Partnerships (JETPs), which have been celebrated as a step change in mobilising finance for decarbonising the energy sector while also paying attention to social justice. This section briefly summarises existing JETPs as a basis for exploring the potential to strengthen them through carbon markets. After COP26, countries like South Africa, Egypt, and Indonesia have committed to JETPs, with Vietnam and Senegal signing up more recently. These partnerships signal a shift towards sustainable energy systems with environmental and social benefits. The interface between JETP and carbon markets has not yet been elaborated very well, although the energy sector clearly generated a lot of carbon market experience and substantial JETP financing gaps remain. It is also worth noting that while the issue of just transition was highly visible at COP28, no new JETP agreement was announced. This is a clear indication that the relatively small number of donor countries are not willing or able to expand this approach massively with public finance in the short term.

South Africa was the first country to publicly commit to reducing its reliance on coal-fired power through the JETP announced at COP26. This initiative aims to transition to renewable energy sources, creating jobs, and boosting economic growth while mitigating coal industry impacts on communities. International partners plan to mobilise an initial USD 8.5 billion between 2023 and 2027, with additional commitments totalling USD 3.5 billion from Denmark, the Netherlands, and Spain, emphasising private sector investment in new energy generation capacity (The Presidency of the Republic of South Africa 2023). The World Bank pledged USD 1 billion through a Development Policy Loan, raising South Africa's JETP funding to USD 11.9 billion (World Bank 2023). The JETP Implementation Plan seeks over USD 98 billion in the next five years, advocating for grants or concessional loans to prevent unsustainable debt (The Presidency of the Republic of South Africa 2023). Whether carbon markets can play a role in delivering the JETP goals remains unclear, but what is certain is that a large financing gap remains, and South Africa has good carbon market experience from both CDM and domestic carbon pricing schemes.

At COP27, **Egypt** took the lead in advocating for JETPs and launched the Country Platform for the Nexus of Water, Food, and Energy (NWFE) in 2022, with a total investment of USD 14.7 billion, of which USD 10 billion was allocated to the energy sector with the European Bank for

Reconstruction and Development (EBRD) as the energy pillar partner. Egyptian Minister for International Cooperation, Rania A. Al-Mashat, stated at COP28 that the NWFE aligns with JETP principles aiming to secure larger-scale financing for ambitious climate goals (NWFE 2023a). The updated NDCs target a 42 % renewable energy capacity by 2030, accelerating Egypt's low-carbon development pathway. Private sector investments in solar and wind energy projects have mobilised USD 2.18 billion, complemented by the EBRD's expertise in leveraging an additional USD 10 billion in private capital (NWFE 2023b).

Vietnam's JETP is developing a "Resource Mobilisation Plan," outlining over 400 projects eligible for funding, with a focus on energy infrastructure, including wind and solar farms, grid enhancements, and battery storage systems (Socialist Republic of Vietnam 2023). Developed countries, notably G7 members, have pledged USD 8.077 billion through JETPs, but only USD 321.51 million is in grants (2 bn) with USD 2.7 billion in preferential loans and USD 4.8 billion in market-rate loans. Despite Vietnam's preference for more grants and loans, the pledged USD 15 billion falls short of the estimated USD 134.7 billion needed by 2030. The JETP aims to increase renewables to 47 % of Vietnam's energy mix by 2030 (Wischermann 2024).

The **Indonesian** JETP aims to secure USD 20 billion in combined public and private funding to facilitate an equitable energy transition (Climate Commission 2023). Over 400 power projects have been identified to align with this initiative, accompanied by the release of a

	Canada	Denmark	EU	France	Germany	Italy	Japan	Norway	UK	USA	ETM (CIF- ACT & MDB)	TOTAL
Grants/TA	10	1.9	29.6		167.2					66.7	20	295.4
Concessional Loan	81.4	60	1091.1	540.5	1474.5		1700				1999	6946.5
Non-Concessional Loan									50	1000	540	1590
Equity		100			9.5			250	25			384.5
MDB Guarantee									1000	1000		2000
Other/ to be defined						270.3			75			345.3
Total	91.4	161.9	1120.7	540.5	1651.2	270.3	1700	250	1150	2066.7	2559	
% Against total public funding commitment (USD 11.6 Bn)	0.8	1.4	9.7	4.7	14.3	2.3	14.7	2.2	9.9	17.9	22.1	

Figure 2: Financing overview of Indonesia's JETP (in million USD)

Source: JETP 2023.

Comprehensive Investment and Policy Plan (CIPP) for Indonesia's JETP (JETP 2023). Despite their economic importance, Indonesia is actively collaborating with partners to strategise the early closure of existing coal plants. Indonesia aims to increase the share of renewables in on-grid power generation to 44 % by 2030, requiring an additional investment of USD 97.3 billion (JETP 2023). Rachmat Kaimuddin, Indonesia's Deputy Coordinating Minister for Infrastructure and Transportation, stresses the need for investors to adopt unconventional financing approaches to phase out coal power (Take 2023). In response to limited grant finance (2.5 %), Indonesia has adjusted closure timelines for coal plants (see Figure 2) (JETP 2023).

In June 2023, **Senegal** was the most recent country to forge a JETP, the second in Africa. As part of the deal, the country aims at 40 % renewable energy in its electricity mix by 2030. The JETP, a collaborative effort between Senegal, France, Germany, Canada, and the EU, pledges EUR 2.5 billion in new financing over 3 to 5 years from 2023, primarily through preferential loans, with EUR 150 million in grants (European Commission 2023). Senegal plans to finalise a long-term low-emission development strategy (LTS) by 2024, enhancing its climate ambition and guiding future NDCs (European Commission 2023). The Senegal JETP addresses national energy policy issues, prioritising clean energy access and sustainable development goals.

What emerges is that JETPs are a novel approach to mobilising climate finance at scale in selected partner countries. Yet, while the overall investment volumes are large, they include substantial shares of commercial finance and the overall investment needs still outpace the mobilised resources by far. So far, carbon markets have not played any role in JETPs, although most partner countries have strong carbon market track records. Given that historically the dominant share of carbon market activities has taken place in the energy sector, there is a need to explore further how carbon markets can be integrated into JETP strategies and financing plans. In fact, the US-led Energy Transition Accelerator (ETA) already carries this ambition in its name and relies on carbon markets to mobilise investments, although there is no obvious formal links to JETPs yet.

These JETP agreements have encountered significant challenges, particularly regarding the high degree of non-concessional finance, defining the precise investment programme, and tailoring the right instrument mix for inherently complex and politically sensitive measures such as early decommissioning of coal power plants.

5. OUTLOOK: THE ROAD AHEAD FOR ARTICLE 6 IMPLEMENTATION IN AFRICA

Building consensus until COP29

COP28 did not achieve progress on finalising multilateral carbon market rules, slowing down much-needed mitigation action. At COP29 in Azerbaijan, it is essential that Parties overcome their differences and reach consensus on Art. 6 rules without compromising environmental integrity. Throughout the year, particularly at the 60th meetings of the subsidiary bodies to the Convention in June 2024, Parties need to work together to clearly identify landing zones for open issues. If Parties fail again to reach agreement on Art. 6 guidance at COP29, the repercussions could be substantial. A continued absence of broadly accepted rules would lead to diminished transparency and heighten the risk of weakening environmental integrity. Agreed rules are also vital to reduce the uncertainty among market participants that results from unfinished multilateral and national regulatory frameworks. Prolonged uncertainty thus holds back investments and slows down the pace of the required transformation the GST has called for. If carbon market rules remain unfinished, their potential to strengthen the ambition of the upcoming NDC updates due in 2025 would also be severely undermined.

While Art. 6 negotiations will not take centre stage at COP29, there is a full agenda. In addition to having to resolve the issues described above, there are additional tasks for Parties, among others, to complete the guidance for applying corresponding adjustments when transferring ITMOs which was not discussed in Dubai because it had already previously been scheduled for COP29. Finding solutions to these critical elements of the Art. 6 rulebook, however, would provide a significant boost for carbon market implementation, as it would strengthen the clarity of rules and confidence in the process. African countries can contribute to building bridges in the negotiations, and at the same time remain focused on establishing domestic frameworks and partnerships since the overall guardrails of the Art. 6 rulebook have already been agreed at COP26.

Building momentum for the Art. 6.4 Mechanism

2024 is the year when the Art. 6.4 Mechanism is likely to move into full implementation mode. This is important for African countries as it would enable them to initiate carbon market activities without bilateral agreements, and with reduced capacity requirements as the Art. 6.4 activity cycle is overseen by UNFCCC. The first Art. 6.4 activities could potentially be registered in 2024, provided that host countries will approve transition requests early enough for UNFCCC to complete the remaining steps. This would represent a significant milestone in rolling out the new mechanism. There is a critical mass of CDM activities hosted by African countries which allows to build early experience with the new mechanism and to explore approaches for upscaling transitioned PoAs and registering new activities once new methodologies become available.

Despite the failure to advance Art. 6.4 rules at the CMA level, the strides made in 2023 toward the operationalisation of the PACM through regulatory standards are significant. The 2024 work plan for the A6.4SB underscores a strong commitment to further advance work, e.g. on updating CDM methodologies. Additional elements, such as introducing prior consideration

at this early stage, also signal a proactive approach to building the PACM pipeline without further delay. Throughout 2024, the A6.4SB and UNFCCC will remain focused on updating procedures, methodologies, tools, and infrastructure (with the mechanism registry as its cornerstone) to ensure the smooth functioning of the PACM. From the Sustainable Development Tool to the Grievance and Appeal Mechanism, stakeholders can actively engage in shaping a framework that fosters transparency, accountability, and inclusivity.

Advancing host country readiness for Article 6

While UNFCCC rules and a functioning UN mechanism are important for high-integrity carbon markets that support the NDCs of African countries, it is imperative that countries continue building domestic capacities regardless of delays in climate negotiations. Many countries still lack basic institutional capacity and regulatory frameworks to effectively participate in carbon finance mobilisation. Art. 6 implementation demands significant capabilities, and many host nations have already begun to undertake substantial efforts in shaping their Art. 6 frameworks. Some leading countries have already finalised legislation and forged bilateral agreements, while others have barely begun their preparations. For broadening African participation in carbon markets, regional dialogue and cooperation are vital for sharing best practices and experience in what works when crafting regulations and laws to participate in carbon markets, training government officials, and creating national registries and MRV processes. Strong domestic governance and oversight are also crucial factors in preventing activities with low environmental integrity – often driven by international actors – from undermining both national NDC targets and global mitigation ambition.

Addressing legitimate concerns about the equitable distribution of benefits from carbon markets is likely to remain a key concern of many African governments in 2024. Although numerous initiatives strive to bolster host country readiness, there is a need for increased scale, coordination, and customised strategies to facilitate meaningful engagement with Art. 6 at the national and regional levels across the continent. Therefore, despite the delay in finalising Art. 6 rules, there are many aspects of host country readiness that can proceed despite these hiccups, as is demonstrated by the frontrunners in the region.

Can implementation initiatives close the ambition gap?

The wide range and the level of declared ambition of implementation initiatives announced at COP28 and at earlier meetings is impressive. Many initiatives seek to use carbon markets as key policy instruments or are likely to influence carbon market implementation indirectly. However, whether these initiatives are living up to their promises needs to be further analysed critically. So far, previously announced initiatives such as the Africa Carbon Market Initiative and the Energy Transition Accelerator have not yet moved beyond preparatory stages and it is unclear what level of investment and mitigation action they will be able to mobilise. Still, the approach to build smaller and more agile coalitions and partnerships that drive implementation more forcefully than the consensus-based UN process remains compelling. On this point, JETPs are particularly salient and have the potential to meaningfully transform fossil-fuel reliant energy systems in important emerging economies. However, JETPs have also struggled to design approaches for complex transition challenges. Countries such as Vietnam

and Senegal could benefit from integrating and coordinating their JETP and Art. 6 efforts more closely to attract investments through carbon market cooperation.

What emerges, however, is that carbon markets can strengthen such implementation initiatives only if they are robustly designed, anchored in the Art. 6 rulebook, and aligned with host country NDCs. Therefore, progress on UNFCCC rules for Art. 6 and complementary implementation initiatives are mutually reinforcing each other. Therefore, 2024 and COP29 need to witness decisive progress on both climate negotiations and implementation initiatives in order to start closing the ambition gap that the Global Stocktake has reminded Parties to the Paris Agreement of.

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