

## IETA Input to the Article 6.4 Supervisory Body

### Structured Public Consultation on Removal Activities under the Article 6.4 Mechanism

June 2023

#### INTRODUCTION

**IETA appreciate the efforts** by the Article 6.4 Supervisory Body (SB) and the Secretariat in advancing work on removal activities in the Article 6.4 mechanism, and note the progress made through deliberations at SB005. We specifically welcome the interaction and active listening to the input from observer organisations to advance the work of the SB.

**We welcome the new structured public consultation** on removal activities and wish to reiterate the previous submissions made by IETA on removals in the 6.4 mechanism in [October 2022](#), [March 2023](#) and [May 2023](#). We also appreciate the effort to link the process on Recommendations for removal activities more clearly with the parallel work on Requirements for the development and assessment of mechanism methodologies, Baselines and monitoring methodologies, the development of a mandatory Sustainable development tool and the Activity cycle procedure for projects in the Article 6.4 mechanism.

In response to the questions outlined for the *structured public consultation* contained in [Information note: Guidance and questions for further work on removals \(Version 02.0\)](#) A6.4-SB005-A02, IETA's input is structured around seven sections:

#### *Executive Summary*

- 1. Definition and Importance of Removals in the Article 6.4 Mechanism**
- 2. Crediting and Accounting for Removal Activities**
- 3. Timeframes for Crediting, Monitoring and Reporting**
- 4. Addressing Reversals**
- 5. Avoidance of Leakage**
- 6. Avoidance of Other Negative Environmental or Social Impacts**
- 7. Types of Removal Activities with Limited Prior Experience and Precedents**

## EXECUTIVE SUMMARY

As the urgency of addressing climate change escalates, IETA firmly believes that international carbon markets under Article 6 need to play an integral role in accelerating vital investments into removal activities that enable the achievement of the goals of the Paris Agreement. **The international community must design effective recommendations and a robust deployment framework which facilitates private sector investments whilst ensuring high levels of environmental integrity.** In response to the structured public consultation, IETA recommends the following:

1. Consideration of elements raised in the structured public consultation should aim to be **generally applicable to all removal activities**. We support the recommendation to CMA 5 to continue deliberations on further technical requirements which may be activity type- or category-specific;
2. **Draw on the lessons learned from the clean development mechanism (CDM) and other crediting programmes** when considering crediting, monitoring, reporting, accounting and addressing risks of reversals from removal activities, especially for activities such as afforestation/reforestation (A/R) and carbon capture and storage (CCS) where precedent exists.
3. **Consider whether different monitoring and reporting requirements may be necessary for different activity types**, given the diversity of carbon removal activities. Monitoring periods should be set either to a number of years, a specific set of conditions, or a combination thereof;
4. To achieve a streamlined approach, the SB could **establish recommendations for certain “clusters” of removal types** rather than implementing unique recommendations for each type of removal activity. IETA envisages the main basis of clusters to be the various sinks and reservoirs in which removed carbon is stored (e.g., oceans, biomass, soil, geology, products);
5. **Ensure a robust accounting framework** that align with the IPCC Guidelines for National Greenhouse Gas (GHG) Inventories to help host countries smoothly integrate carbon removal credits into their inventory accounting;
6. **Carefully assess approaches to managing liability** to ensure appropriate risk and reward sharing between project developers, host countries and credit buyers, especially when considering any additional participation requirements for host countries, potential interactions between removals methodologies and national GHG accounting, and the possible design of buffer pools;
7. **Apply activity-specific buffer pool contributions based on scientifically aligned risk** to avoid situations in which low risk activities subsidise high risk ones through unreasonably high buffers, drawing on the learnings from other crediting standards;
8. **Develop a clear framework for the avoidance of negative environmental or social impacts** for all projects under the 6.4 mechanism, including any specific considerations for removal activities. The establishment of an independent and well-defined grievance and appeals mechanism as mandated in the Rules, Modalities and Procedures (RMPs) will further strengthen the environmental and social integrity of the mechanism;
9. **Focus initial deliberations on recommendations for well-known removal methods** to expedite the operationalisation of the mechanism, while developing a clear process for assessing the potential integration of additional carbon removal approaches over time. Recommendations should avoid inadvertently limiting the types of removal activities that may be included under the mechanism, recognising the need for a diverse range of removal methods – including those yet to be invented – to achieve the ambitious goals of the Paris Agreement.

## 1. DEFINITION AND IMPORTANCE OF REMOVALS IN THE ARTICLE 6.4 MECHANISM

IETA recognises that urgent, large-scale reductions of GHG emissions remain the utmost priority to tackle climate change and highlights the role of market-based instruments to facilitate such mitigation activities. Simultaneously, IETA recognises the need for carbon removals in scaling up mitigation ambition and addressing any residual emissions from hard-to-abate sectors, to first stabilise and then reduce atmospheric concentrations of CO<sub>2</sub> in order to limit further warming. The science is clear: both land based and engineered carbon removals are needed to limit global warming.

Carbon markets, including the generation of verified mitigation outcomes under the Article 6.4 mechanism, have a key role to play in facilitating such developments by setting international standards for crediting for removal activities and scaling up financing towards such activities.

Removals are achieved through the net-flow of GHG from the atmosphere into durable non-atmospheric carbon sinks and reservoirs. Unlike emission reduction activities, removals require adequate monitoring and accounting of carbon sinks and reservoirs, clarity of responsibilities for addressing non-permanence and carbon reversal including over the longer term, and the enhanced implementation of social and environmental safeguards. As such, care is needed in the design of mechanisms that can support their deployment.

IETA believes that the definition of removals should be clear and simple to avoid confusion and conflation with emission reduction or avoidance activities. It should clarify the relationship between anthropogenic actions and the atmosphere-Earth-ocean interactions in which removals form part of the Earth's natural carbon cycle and active climate system. The definition should also remain open for potential methods of removal still under development. Based on this understanding, IETA agrees with the following definition from the IPCC SR1.5, namely that carbon dioxide removals (CDR) refer to *“anthropogenic activities removing CO<sub>2</sub> from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or in products. It includes existing and potential anthropogenic enhancement of biological, geochemical or chemical CO<sub>2</sub> sinks, but excludes natural CO<sub>2</sub> uptake not directly caused by human activities.”*<sup>1</sup> We suggest that the Article 6.4 mechanism focus on outcomes of removal activities, as credits generated should be based on robust quantification of the net CO<sub>2</sub> removed from the atmosphere rather than the specifics of the underlying process.

Considering the limited experience with the removal of atmospheric GHGs other than CO<sub>2</sub>, IETA does not see a need to explicitly address those in the definition of removals for the purpose of the Article 6.4 mechanism. Broadening the definition of removals to other gases can risk conflating emission reductions and carbon removals (e.g., destruction of CH<sub>4</sub> emissions from point sources).

IETA considers it essential that the SB and market players continue to collaborate closely in developing a robust methodological framework for removals that ensures environmental integrity whilst minimising the administrative burden for project developers, host countries and other market participants alike. Large amounts of finance will be needed from the private sector for both land-based and engineered removal activities in the coming years. Clear rules and methodologies will need to be operationalised by market players, and undue burden on activity proponents must be avoided. Where rules present excessive administrative burden or lack of incentives, participants may be deterred from engaging in the Article 6.4 mechanism and instead utilise alternative crediting programs. By fostering

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<sup>1</sup> IPCC, 2018: Global Warming of 1.5°C, Annex I: Glossary

a supportive and enabling environment, the Article 6.4 mechanism can play a key role in facilitating private sector investment towards carbon removal activities and low-carbon development.

Guidance produced should, to the extent possible, be applicable to all types of removal activities without additional provisions or requirements which may favour/oppose specific activity types, creating further complexity for project developers and impeding investments. The science is clear – we need to rapidly scale up a diverse array of solutions to address climate change at the scale and urgency required.

## 2. CREDITING AND ACCOUNTING FOR REMOVAL ACTIVITIES

The value of removal activities is inherently dependent on their ability to deliver net removals in a durable manner, as specified in the definition above. If the quantification approach and means of addressing potential reversals are not well designed, the environmental integrity of the mechanism will be undermined. Removal activities should therefore warrant specific considerations and provisions, building on experience from both the CDM and from other independent crediting standards.

Enhanced terrestrial (forest-only) and geological sinks and reservoirs were already considered under CDM across the last 20 years, leading to significant learnings and establishing important precedents among UNFCCC Parties regarding several key aspects that directly relate to the crediting of carbon removals under the Paris Agreement.<sup>2</sup> There are both positive and negative lessons to learn from the CDM experience. It would be helpful for the SB to clarify whether and how the variety of approaches adopted under the CDM have been fully considered in its deliberations and provide certainty on which aspects have already been discarded, and/or which remain as options.

**Notably, the rules for crediting of both afforestation/reforestation (A/R) and geostorage activities under the CDM were strongly influenced by the rules for country reporting under IPCC National GHG Inventory Guidelines.** A/R was considered a candidate for crediting under the CDM in part because it involved a clearly identifiable change in land use, which triggered specific reporting requirements by host countries. Geostorage rules were aligned with IPCC reporting requirements which served to fulfil any obligations laid out there for any country hosting carbon capture and geological storage CDM project activities.

In addition, **specific participation requirements were set down for countries wishing to host A/R and geostorage projects.** A/R rules required candidate host countries to define areas of forest, and geostorage rules required candidate host countries to submit an expression of agreement to the UNFCCC and to develop national laws and regulations to control storage site selection, design, operation, closure, liability etc.

**Drawing upon these experiences, IETA suggests that the SB undertakes further deliberations on whether and how similar host party participation requirements could be needed and possibly established under the Article 6.4 mechanism.** IETA takes the view that the specific nature of carbon removals, and the entwined need for country Parties to carefully manage enhanced sinks and reservoirs within their territories in order to avoid carbon reversals, calls for far greater involvement

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<sup>2</sup> [Decision 5/CMP.1](#); [Decision 10/CMP.7](#)

and the establishment of responsibilities for host countries relative to emission reduction activities (e.g., establishing strong policy and/or regulatory safeguards that protect enhanced sinks and reservoirs of carbon over the long-term). IETA also notes that these safeguards are likely to be specific to different types of sinks and reservoirs, and that in some cases they can draw upon precedents from the CDM (e.g., forests, geological storage), while in other cases there is no established precedent indicating a need for significant further deliberations including by SBSTA (e.g., ocean storage).

The safeguards described above are also strongly correlated with the accounting that shall be applied to carbon removals. Maintaining the environmental integrity of the Paris Agreement, and the effective measurement of progress towards its central goal, calls for any carbon reversals from enhanced sinks and reservoirs to be effectively identified, measured and reported in the national GHG inventories of the host country Parties. As such, it is incumbent on Parties to ensure that supported removals under the Article 6.4 mechanism are an integral part of the wider **accounting framework for the Paris Agreement**. A robust accounting framework means that the transfers of Article 6.4 removal credits between Parties, any related corresponding adjustments, and the stocktake of progress against NDCs, should all seamlessly fit together.

As such, methodologies for carbon removals must be developed cognisant of the recommended approaches in IPCC Guidelines for National GHG Inventory compilation. Appropriate methodological requirements, reporting standards (e.g., requirements for certain higher Tiers to be applied by Parties hosting activities) and/or the use of accounting techniques that can reconcile differences, may all need to be explored to ensure there is consistency in records across issued credits and the reductions and removals recorded by Parties. The intimate connection between project activities and national GHG inventory reports calls for fair means by which to share both risks and rewards of credited removal activities between project developers and hosts.

**We also note that for removal activities involving geostorage, careful consideration must be given to the use of forward-looking baseline adjustments over time.** Typically, in the absence of other sources of income, the only economic case for undertaking these engineered removals is the carbon revenue. Reducing the baseline of these activities over time without sound reasoning will diminish crediting levels awarded in the future, which will erode the economic attractiveness of such activities. Similar issues may also arise in the case of other carbon removal methods. IETA therefore suggests careful consideration of whether durable removal activities might warrant differential treatment of baselines relative to other types of activities under the Article 6.4 mechanism.

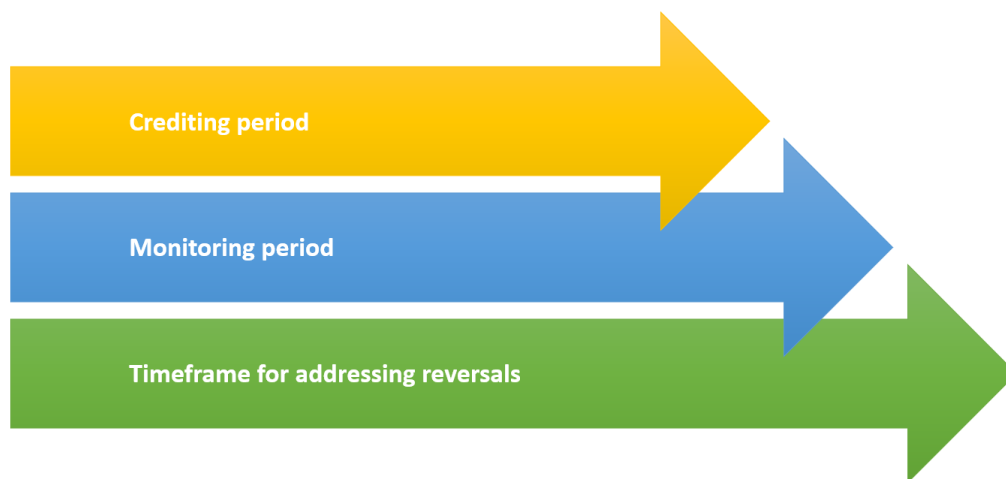
### 3. TIMEFRAMES FOR CREDITING, MONITORING AND REPORTING

The monitoring, reporting and crediting timeframes for removal activities should build on previously agreed provisions in the Article 6.4 Rules, Modalities and Procedures (RMP), past experiences from the CDM, and knowledge gained from other independent crediting standards. Different monitoring periods, timeframes for addressing reversals, and reporting requirements may be applicable for different types of removal activities. As credits (A6.4ERs) from removal activities may be used to offset long-lived CO<sub>2</sub> emissions, which may linger in the atmosphere for centuries,<sup>3</sup> the monitoring period

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<sup>3</sup> F. Joos et al., *Carbon dioxide and climate impulse response functions for the computation of greenhouse gas metrics: a multi-model analysis*, (2013), Copernicus Publications.

and timeframe for addressing reversals must be long enough to safeguard environmental integrity, yet realistic in order to not deter widespread uptake of removal activities under the Article 6.4 mechanism. We visualise our interpretation of the interrelationships between the crediting period, the monitoring period and the timeframe for addressing reversals in the graphic below.



### **3.1 Crediting period**

The crediting period is the time over which activities are eligible for issuance of credits under the mechanism. Under the CDM, A/R rules allowed projects to select either a fixed crediting period of 30 years, or a period of 20 years, renewable twice. Geostorage activities could select either a fixed 10-year crediting period or a 7-year period, renewable twice. Under the Article 6.4 RMP (CMA 3 para 31. (f)), activities involving removals under the Article 6.4 mechanism shall apply for a crediting period of a maximum of 15 years renewable twice that is appropriate to the activity and subject to approval by the Supervisory Body.

IETA supports the approach agreed upon in the RMP and does not foresee the need to deliberate further.

### **3.2 Monitoring period**

The monitoring period for a project is understood to refer to the duration over which project proponents are responsible for monitoring a project and, in particular, for monitoring the resultant enhanced carbon sinks or reservoirs arising from an activity. As noted above, host countries – in implementing the IPCC guidelines for National GHG Inventory Compilation – should remain responsible for monitoring enhanced sink and reservoirs in perpetuity (or to the time extent recommended therein, for example, in the case of geological reservoirs as described in Volume 2, Chapter 5). As compared to projects delivering emissions reductions, the monitoring period of removal activities may need to be extended beyond the final crediting period in order to observe and adequately address potential reversals.

The monitoring period can be described as the crediting period (C) + X, where X represents a specified period of time *OR* a set of conditions for when monitoring may need to be extended after the end of

the crediting period, or a combination thereof. These requirements may need to be different for different types of enhanced sinks and reservoirs.

**In these respects, IETA notes that different monitoring and reporting requirements were applied to the different types of project sink enhancement activities under the CDM.** A/R rules, in addition to standard CDM requirements, also required project activities to consider any changes in project circumstances that could affect land tenure and access to carbon pools. The longer crediting periods applied to forestation projects compared to conventional CDM activities also provided at least a partial means by which longer monitoring periods could be implemented.<sup>4</sup> Geostorage rules, in addition to standard CDM requirements, required a number of components relating to monitoring: (a) mandatory reporting at maximum intervals of 5 years (b) long-term post closure monitoring for a minimum of 20 years after final issuance (c) specific conditions under which monitoring could cease.

Thus, as considered under the CDM, the applicable timeframes and related procedures for monitoring and reporting may vary depending on the type of removal activity and type of enhanced sink or reservoir considered. Consequently, **monitoring commitments might not be best defined as a simplistic set number of years, but rather as a condition or set of conditions that indicate long-term, safe and secure storage (or a combination thereof).** The monitoring period length should reflect the security of the storage medium chosen for the activity and the risk of potential reversal. For example:

- **In removal activities involving geostorage**, instead of (or in addition to) a fixed number of years, the project proponent should monitor "plume stability". Once they can show the CO<sub>2</sub> plume is no longer migrating, has not infiltrated adjacent reservoirs, and has not broken through to surface there is a greater level of confidence that extensive ongoing monitoring is no longer needed. Depending on the site and the circumstances, such a state could be reached in a matter of a few years after injection, or in an extreme case could take much longer.<sup>5</sup>
- **In A/R projects**, monitoring for a certain number of years may be more appropriate to ensure that credits from a buffer pool remain available to be cancelled should there be a reversal.

Different monitoring methods may be appropriate for different types of project activities and carbon pools at different temporal and spatial scales. Monitoring CCS projects may, for example, consist of modelling activities using a reservoir model, geologic evaluations, a CCS monitoring programme, and storage site closure activities. For carbon geostorage activities, the figure developed by Verra below provides a useful indicative timeline to help guide the work on time horizons for the SB:<sup>6</sup>

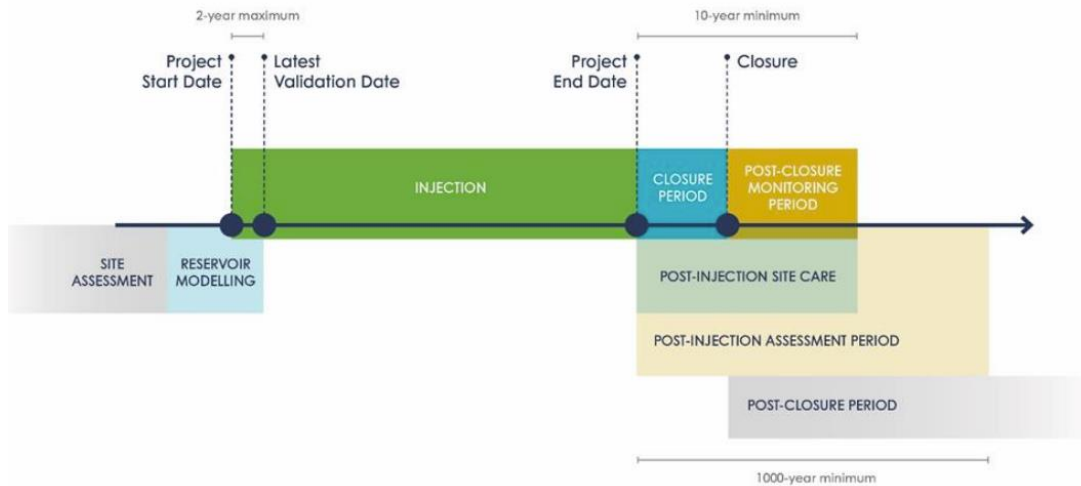
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<sup>4</sup> Drawing on an assumption that forests reach C saturation at around 20 years of growth – as per IPCC Guidance – then extending the monitoring period for more than 20 years allows for the continued monitoring of carbon stocks even where the flow of carbon removals may have to diminished to only negligible levels.

<sup>5</sup> As set out in Section 3 of Appendix B to the Annex of Decision 10/CMP.7 (Modalities and Procedures for CCS).

<sup>6</sup> Verra, *Geologic Carbon Storage (GCS) Requirements*, (2023) <https://verra.org/wp-content/uploads/2022/12/GCS-Requirements-v4.0-FINAL.pdf>





### **3.3 Timeframe for addressing reversals**

The timeframe for addressing reversals may have different interpretations. It can refer to either the timeframe between an observed reversal and the execution of an agreed action to compensate for it (e.g., through the cancellation of credits in a buffer pool) or the “*time horizon*” or “*permanence period*”, which can be considered as a period of time over which any reversals need to be addressed by project proponents (including after the end of the crediting period). IETA welcomes further clarity on the use of this terminology.

In general, it seems sensible that the timeframe for addressing reversals by the activity proponent would be the same as the monitoring period, while any reversals after the end of the monitoring period would likely need to be addressed at the responsibility of the host Party.

**We recommend that the SB draw on the learnings from past experiences under CDM and from independent crediting standards and consider how they could apply in the context of the Paris Agreement and NDC timeframes. Based on these learnings, the SB should prepare options for monitoring periods, crediting periods and timeframes for addressing reversals taking account of the different characteristics of various enhanced sinks and reservoirs that can result from removal activities.**

In these deliberations, it is vital to consider whether or how Article 6.4 rules may need to be extended after the end of the crediting period for some types of enhanced sinks and reservoirs, so as to avoid moral hazards.<sup>7</sup> Unless there are requirements for project proponents to continue monitoring and reporting activities beyond this period, the responsibility for addressing any net reversals will ultimately reside with the host Party. This indicates the possible need for enhanced participation requirements for host countries and the means of sharing both risks and rewards for carbon removal activities between project developers, host countries and buyers.

<sup>7</sup> For example, project developers might be able to walk away from inappropriately managed enhanced sinks and reservoirs without recourse for any short-term reversals.



## 4. ADDRESSING REVERSALS

A reversal “occurs when a mitigation activity enhances or preserves carbon stocks in carbon reservoirs but, at a later point in time, some or all of the additional increments in stock caused by the mitigation activity are released to the atmosphere.”<sup>8</sup>

### 4.1 Experiences from the CDM

Under the CDM, different methods were adopted by which to handle non-permanence and carbon reversal risks for the different types of activities (A/R and geostorage). According to the modalities and procedures for **geological carbon storage** (Decision 10/CMP.7), a “net reversal of storage” of carbon dioxide means that:

- (i) For a verification period during the crediting period, the accumulated verified reductions in anthropogenic emissions by sources of greenhouse gases (GHGs) that have occurred as a result of a registered CDM project activity are negative (i.e. the seepage from the geological storage site of the CCS project activity exceeds the remainder of the emission reductions achieved by the CCS project activity);
- (ii) For a verification period after the end of the last crediting period, seepage has occurred from the geological storage site of the CCS project activity.

Thereunder, the letter of approval for a project activity must indicate whether the **buyer** of CERs is responsible for replacing any CERs arising from a net reversal of storage (although the exact means for doing so were never fully articulated) or the **host country** (where it accepted responsibility for any net reversal of storage). Monitoring beyond the final crediting period was required to last for a minimum of 20 years, and the basis for these requirements were laid down in specific participation requirements and rules on storage site selection, development, operation, and closure. Under the same rules, CO<sub>2</sub> geostorage activities were also subject to the withholding of a 5% of issued CERs in a reserve account (“**buffer**”) which was released at the end of monitoring period and the transfer of liability to the host party.

In the case of **A/R** under the CDM, Decision 5/CMP.1 allowed the issuance of only time-limited temporary or long-term CERs, meaning that the buyer of the unit had to replace them in future. The risk of carbon reversal would therefore be covered by the future expiration of the issued credits or the re-registration of the project activity to demonstrate that carbon reversal had not occurred. This approach is sometimes referred to as “horizontal stacking” of credits. Buffer pools were not applied, as temporary (time-limited) credits were instead issued to project activities. The responsibility on buyers of credits to replace tCERs/ICERs resulted in very limited demand for A/R credits under the CDM, and severely restricted the use cases (for instance, they were never accepted in the EU ETS, even though some EU member states directly acquired tCERs/ICERs). As such, experiences from the CDM indicate that temporary crediting is likely to pose significant challenges for effective implementation of the Article 6.4 mechanism. IETA believes the SB should not spend time considering temporary crediting as a viable option and would welcome further clarity from the SB on whether it still considers it for some types of carbon stocks under the 6.4 mechanism.

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<sup>8</sup> WWF-US, Environmental Defense Fund (EDF) and Oeko-Institut (2022). *Methodology for assessing the quality of carbon credits*. Version 2.0. 21 March 2022 (p. 71)

Building on the experiences from CDM and other crediting programmes, **IETA recommends that the SB further deliberate on the different types of approaches available to manage liability and address reversals for various types of removal activities, taking into account their specific nature** (including forest carbon stocks, geostorage carbon stocks, and/or reversals involving other types of carbon sinks and reservoirs e.g., soil or oceans). In these respects, IETA recommends that the SB and UNFCCC Secretariat:

- 1. Compare and consider various means of addressing reversals as agreed by Parties under the CDM (including those approaches not accepted by Parties, such as iCERs) and in other crediting programmes.**
- 2. Prepare options with scenarios for how those approaches could play out for different activity types, stakeholders, timeframes and design considerations, including the relation with national GHG inventories, the application of corresponding adjustments and achievement of NDCs.**

#### **4.2 The use of buffer pools**

We note that buffer pools have been implemented to address risks of reversals for removal activities in several independent crediting standards as well as during the CDM (for projects involving carbon geostorage). In addressing the questions raised in the structured consultation, **IETA recommends that different design considerations for the use of buffer pools be drawn from the different approaches employed by existing independent crediting standards. We also recommend that the SB consider these various approaches and the implications of using them in the Article 6.4 mechanism, including any participation requirements for host Parties, their interaction with NDCs, application of corresponding adjustments and national GHG inventories and potential variations in design according to different types of sinks and reservoirs.**

We also note that to appropriately address risks of reversals, any buffer pools should be designed in a highly robust manner based on a scientifically aligned risk assessment. These risk assessments should be developed before the registration of the project by activity proponents, updated over time, and carefully reviewed by third-party designated operational entities (DOEs) to ensure contributions to the buffer pool are adequate. The level at which the buffer contribution should be determined requires further consideration. It may be possible to set the buffer contribution at:

1. The mechanism level (probably to be avoided given the wide variation in durability between sinks and reservoir types),
2. The level of specific type of sink and reservoir, or
3. The level of specific activities.

We note that the application of various risk assessment tools can have environmental integrity implications for the resultant units. Therefore, we urge careful consideration in potentially relying on these approaches, especially where they involve non-technical risk elements (e.g., financial or political risk). Arbitrage between lower reversal risk activities (e.g., high durability stores) and activities with higher probability of reversals should be avoided. Buffer pools should also consider, rather than duplicate existing domestic regulations that require collateral for addressing reversals.

For technology-based carbon sink enhancements, IETA welcomes the proposal to adopt the 'regulatory safeguards'-style approach for geological CO<sub>2</sub> storage, which draws upon approaches previously agreed under the CDM. In addition, IETA has developed a set of principles to govern the development of tradable reductions and removals through the [High-Level Criteria for Carbon Geostorage Activities](#).

These include six key core methodological components, as well as ten high-level criteria and supporting safeguards to identify and manage any potential risks associated with carbon geostorage (including reversals). **IETA recommends that the SB further deliberates on the potential of similar “regulatory safeguards” approaches to be applied to other types of sinks and reservoirs.**

Furthermore, in deliberating on means to address non-permanence and carbon reversals, we refer to our above observation regarding the responsibility of host country Parties to monitor, report and account for any emissions from enhanced sinks and reservoirs within their national territory, including any arising from Article 6.4 mechanism activities. Thus, **IETA feels that there is an urgent need for a more wide-ranging discussion of how the risks and rewards associated with removal activities be effectively balanced across project developers, host countries and buyers**, cognisant of the need to maintain environmental integrity of the Paris Agreement and to avoid moral hazards.

### **4.3 The use of insurance products**

While we welcome the SB’s progressiveness in considering the role of insurance to address risks of reversals, **IETA urges careful consideration before relying on these emerging approaches.** As noted above, the implementation of buffer pools is a type of risk pooling instrument variously employed today by independent crediting standards. Insurance by third parties could potentially provide a similar risk pooling service, which may be seen as an alternative or complementary approach to that of implementing pooled risk buffers. To date, insurance providers have offered policies to underwrite credit non-delivery risk on registered project activities, but to the best of our knowledge have not systematically offered policies that underwrite the risk of carbon reversals from carbon sinks and reservoirs of registered project activities (e.g., against the loss of stored carbon from forests or geological stores).

Such approaches were previously considered for forestation activities (so-called “iCERs”), which did not achieve widespread support among Parties (e.g., at COP6-bis).<sup>9</sup> They may be complex instruments that could be tied to other forms of insurance products relating to carbon reservoirs (e.g., forest fire risk; geological well risks) that require specialist knowledge to define and elaborate on. However, as such approaches mature and the number of providers who can showcase well-functioning insurance products expand, the SB might reassess their potential to contribute to the development and growth of high-integrity projects under the Article 6.4 mechanism.

## **5. AVOIDANCE OF LEAKAGE**

IETA highlights the importance of clearly defining leakage while noting how the term “carbon leakage” is used to indicate two distinct phenomena in carbon markets:

1. The relocation of emission-intensive trade exposed (EITE) activities from jurisdictions with a higher cost of carbon to jurisdictions with a lower one;
2. An increase in emissions outside the boundary of an emission reduction or removal activity as a result of activity implementation (e.g., indirect land use change arising from the afforestation of agricultural land, which may lead to the clearance of other forested land outside of the activity boundary for agricultural purposes).

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<sup>9</sup> See, for example FCCC/SBSTA/2003/10/Add.3

IETA's comments in this section refer to the SB's role in creating rules to address this second type of leakage in removal-type projects.

IETA considers that a thorough leakage risk assessment and/or other tools and methods can be employed *ex ante* to assess the impact of an activity in respect of potential sources and the scale of leakage risks (e.g., environmental and social safeguards, national and regional laws and regulations on land development and land covenants; lifecycle assessment). Secondly, methodological design is critical. For instance, methodologies for land-based removals must not allow for the opting in and out of specific land parcels over the course of a project activity, especially where jurisdictional approaches are allowed. Rather, project boundaries and participating entities should remain fixed throughout the crediting and monitoring periods.

IETA also notes that the use of standardised adjustment factors has been discussed as a simplified method to account for leakage. While IETA recommends that leakage be assessed at the project level using project-specific information, in the case that adjustment factors are used, any standardised leakage measure should include periodic verification of historic leakage post implementation of projects to ensure a high level of environmental integrity of projects.

IETA welcomes a wider dialogue on the potential approaches to manage leakage risks for both land-based and technology-based removal activities.

## 6. AVOIDANCE OF OTHER NEGATIVE ENVIRONMENTAL OR SOCIAL IMPACTS

The prior consideration and avoidance of negative environmental or social impacts of any types of projects under Article 6.4 is of utmost importance for the trust and integrity of the mechanism and its contribution to sustainable development. Social safeguard provisions should be ensured through both:

1. Ex-ante consultations, and
2. Ex-post mechanisms to report and address any grievances.<sup>10</sup>

Whilst acknowledging that the enforcement of environmental and social protection laws is a national prerogative of the host Party, it is important to ensure that all activities under the Article 6.4 Mechanism are aligned with internationally agreed conventions and principles on environmental and social considerations, including the free, prior, and informed consent (FPIC) of Indigenous Peoples and local communities. If a country or region does not have specific guidelines or processes, an impact evaluation before project initiation may be a feasible option. Such evaluation should be verified by a third-party assessor and may lead to the modification or rejection of the project. As agreed by the SB at its latest meeting (SB005), all projects should undergo a mandatory sustainable development assessment. This applies to all projects under the Article 6.4 mechanism, including activities involving removals. For each project, depending on the scale, location and activity type, there may be specific additional concerns which has to be considered at the activity level.

Under the CDM, additional environmental and social safeguards were adopted in the modalities and procedures for both afforestation/reforestation and geostorage activities. In these respects, IETA urges the SB to review these previous requirements and consider, *inter alia*: whether they can be adopted for use under the 6.4 mechanism, whether any additions or omissions are necessary, and whether the same conditions could be applied to all types of removal activities.

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<sup>10</sup> *Recommendations to the Article 6.4 Supervisory Body on Activities Involving Removals*, (2023), [https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202303141631---Joint%20Submission%20on%20Removals\\_March%2015.pdf](https://www4.unfccc.int/sites/SubmissionsStaging/Documents/202303141631---Joint%20Submission%20on%20Removals_March%2015.pdf)

- Whether they are suitable for use today under the 6.4 mechanism;
- Whether any other additions or omissions are necessary; and
- Whether the same conditions could be applied to all types of removal activities.

The establishment of an independent and well-defined grievance and appeals mechanism as mandated by the RMP will further strengthen the environmental and social integrity of the mechanism. This should remain accessible, transparent, robust and with clearly defined scope to do no harm. Design considerations of such a grievance mechanism have been further elaborated in numerous previous submissions.

## 7. TYPES OF REMOVAL ACTIVITIES WITH LIMITED PRIOR EXPERIENCE AND PRECEDENTS

There is a wide range of innovative emergent, novel, removals methods being considered for achieving net zero emissions (e.g., as mentioned in, IPCC AR6). Some of these were never before considered under the Kyoto Protocol and CDM, while others were not considered suitable for crediting at that time.<sup>11</sup> Many of these project activities are now included in the programmes of other carbon crediting bodies, proving their potential viability for credit generation.

In these respects, IETA therefore requests the SB to consider, *inter alia*:

- Whether and how one-size-fits-all rules for removals, taking account the different characteristics of enhanced sinks and reservoirs, are viable, feasible or desirable.
- Whether the SB expects to develop rules that apply to all types of removal methods, or it is intending to differentiate.
- Whether and how a definition of removals might need to take account of these differences, reflecting the nature of existing precedents.
- How the SB might make the best use of methodologies developed in other independent crediting standards.
- Whether the SB sees ex-ante lifecycle assessment approaches as being relevant to the determination of the eligibility of certain removals methods or specific removal activities.
- How the SB might be best able to address removal methods and methodologies where no precedent exists (e.g., through the activity cycle procedure, and taking into the potentially important role of Parties in deciding whether various removal methods may be eligible under the mechanism).

To enhance the speed at which the mechanism can become operational, **IETA encourages the SB to focus its initial deliberations on the better-known removal methods before considering the procedure by which less well-known removal methods might be incorporated into the 6.4 mechanism.** Further, IETA strongly encourages the SB to prepare recommendations that are sufficiently broad to avoid precluding novel technologies from being eligible for crediting under the Article 6.4 mechanism should they become viable. In order to achieve the Paris Agreement goals, a plethora of removal technologies will be needed – even those that may not yet have been invented.

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<sup>11</sup> For example, the Bonn Agreements on the Implementation of the Buenos Aires Plan of Action; see Decision 5/CP.6.

## ABOUT IETA

IETA is a non-profit business organisation with a membership of over 300 companies operating in compliance and voluntary carbon markets. Since its foundation in 1999, IETA has been the leading voice of business on market-based ambitious solutions to climate change. We are a trusted adviser to governments to support them build international policy and market frameworks to reduce greenhouse gases at lowest cost, increase ambition, and build a credible path to net-zero emissions. See [www.ieta.org](http://www.ieta.org) for more information.

IETA and its members look forward to further engaging with the Article 6.4 Supervisory Body. Do not hesitate to contact Björn Fondén ([fonden@ieta.org](mailto:fonden@ieta.org)) or Andrea Bonzanni ([bonzanni@ieta.org](mailto:bonzanni@ieta.org)) for any questions.