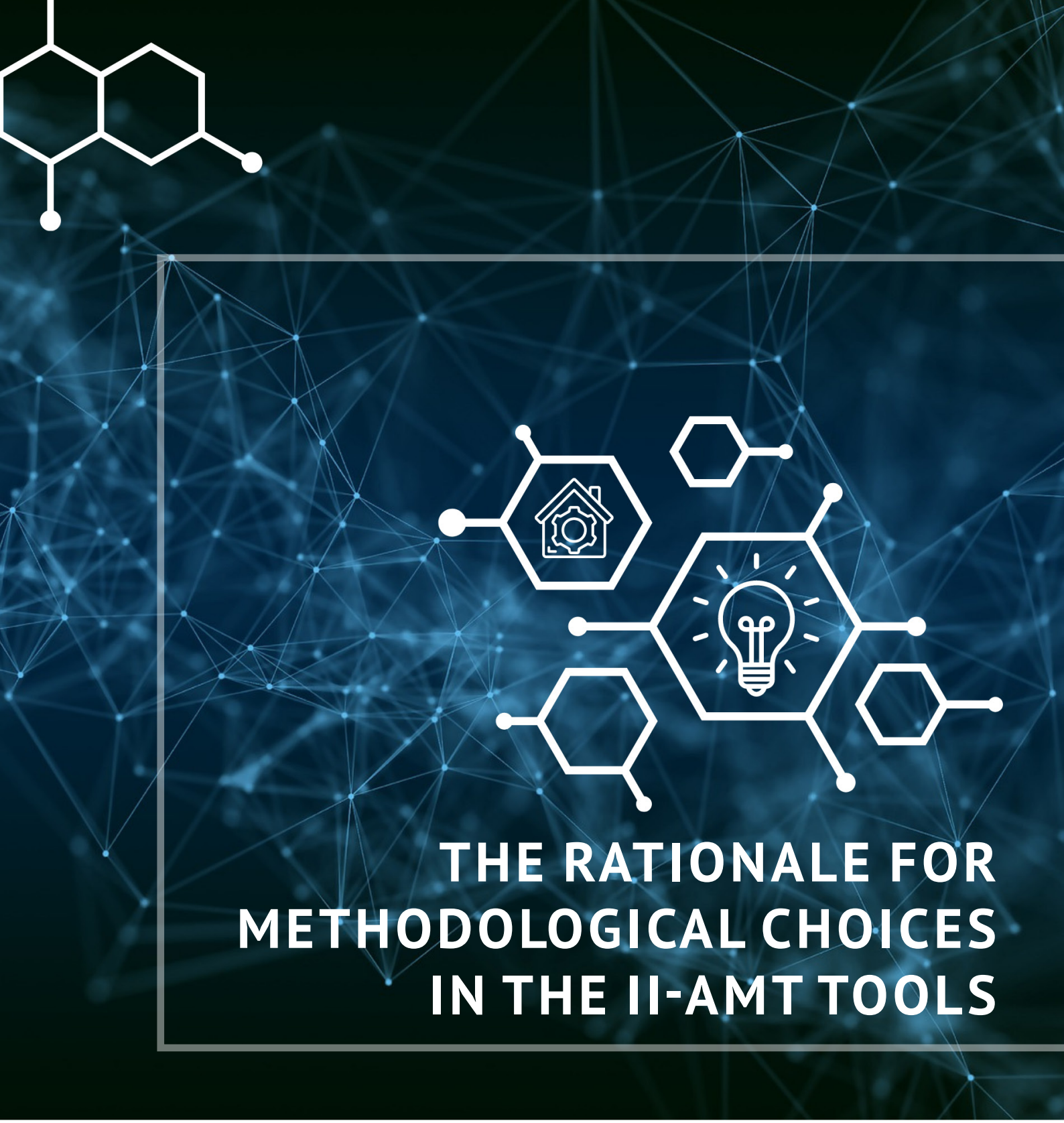

THE RATIONALE FOR METHODOLOGICAL CHOICES IN THE II-AMT TOOLS

BACKGROUND DOCUMENT OF THE INTERNATIONAL INITIATIVE FOR DEVELOPMENT OF ARTICLE 6 METHODOLOGY TOOLS

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Introduction

The methodological tools and guidance document developed by the expert team of the International Initiative for Development of Article 6 Methodology Tools (II-AMT) only capture the results but not the discussion behind the methodological choices in the documents. Therefore, this background paper provides the rationale for certain approaches in the tools and the NDC guidance document. Thereby, the focus will lie on the most crucial ones.

The general scope of and approach to the tools and the guidance document is described in more detail in the Chapeau document and shall therefore not be reiterated here. It is important to remember that the tools are sector- and technology-agnostic, meaning that activity-specific considerations are not taken into account at this stage. Note however that some procedures in the tools may not apply to removals, and the tools signal where this is the case. Further procedures for removals may be considered at a later stage.

Regarding the context, the efforts by the II-AMT experts took place in parallel with the technical meetings of the Article 6.4 Supervisory Body (SB). The experts aimed at taking up the outcomes of the SB meetings in the development of the tools and the guidance document. However, due to the political nature of the SB meetings, this was more difficult than anticipated. The status of methodological work by the SB reveals that further elaboration and guidance is required to reach the goal of methodologies that can be applied by mitigation activities in practice. The inability of SB members to agree on recommendations at its third meeting (SB003) in November 2022 prevented the adoption of a decision on the application of methodological requirements at the fourth Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA.4) in Sharm el-Sheikh. This led to a situation where the II-AMT experts needed to further advance the operationalisation of the requirements beyond the work of the SB to fulfil the objectives of the II-AMT. At its fourth meeting (SB004) in March 2023, the SB achieved limited progress advancing on methodological requirements. Instead, the discussion focused more on process-related questions including on guidance and questions for further work on methodologies.

This situation reveals the importance of independent efforts to advance the application of methodological Article 6 requirements. Throughout its development phase, the II-AMT submitted its progress to the meetings of the SB and engaged with other relevant carbon market stakeholders and governance bodies. The II-AMT is committed to supporting the operationalisation of the Article 6.2 and 6.4 requirements in such a manner that these ensure environmental integrity. The sections that follow lay out the choices that experts have taken to achieve this goal and where necessary provide justifications for the proposed approaches.

TOOL01: Tool for the demonstration and assessment of additionality

The additionality tool comprises six steps, whose rationale is described below.

Avoiding emissions lock-in: anything that is commercially available does not qualify

The eligibility pre-check aims to prevent emissions lock-in by limiting the eligibility of activities under the Article 6.4 mechanism to activities that are not featured on any negative lists, that are in line with the host country's long-term low-emissions development strategy (LT-LEDS) (if an LT-LEDS is available) and that do not lead to the continuation of emissions intensive technologies. The latter implies that an Article 6.4 activity should have GHG emissions intensity per unit of production/consumption that is lower than the intensity of the lowest emitting, technically feasible and *commercially available* production pathway for the product, service, or output delivered. In addition, the pre-check requires that, for proposed activities that lead to the replacement of technologies, the emissions intensity of the new technology is aligned with the generally accepted (IPCC/IEA) emissions scenario for reaching the long-term goal of the Paris Agreement.

The tool uses the term "commercially *available*" while defining "emissions-intensive technologies". *Commercially available* means that the emissions-intensive technology can be obtained in the country where the mitigation activity takes place, either off-the-shelf or via a bidding process or through a direct contracting process. The expert team decided against using the criterion of "commercially attractive" because it would allow highly emitting technologies and incremental improvement to satisfy the emissions-intensive definition, as there may be many low carbon technologies that are currently "available" but not yet the most "attractive". Landfill gas with power generation, for example, is available almost everywhere, but it is not commercially attractive in many low-income countries. Similarly, there are improved cooking devices available in many countries, but their higher upfront cost means they are not attractive. Going for "commercially attractive" would hamstring our attempt to avoid emissions lock-in, which we define as the proposed mitigation activity not leading to the adoption or prolonging the life of an emissions-intensive technology. Put simply, the concept of "commercially available" is used to ensure that any proposed activity would not lead to emissions lock-in and keep an emissions pathway compatible with the Paris Agreement's long-term goals. The expert team intentionally avoided dictating which proposed activities could generate emissions reductions under these terms because this requires additional granular detail and country-level considerations that are beyond the scope of II-AMT.

No retroactive notification

Mandatory public notification must occur before the start date of the activity to ensure that carbon credit revenues were a component of the decision to undertake that activity in the first instance. In the view of the expert team, this is an important way to screen out activities that are clearly not additional. Compared to the Clean Development Mechanism (CDM), retroactive notification would thus not be possible. The type of public notification being proposed is not sufficient on its own to demonstrate additionality, but anything less than this type of public notification would be insufficient. To clarify, this mandatory step would not require any submission of financial models - it is only a notification of intent to pursue carbon revenue.

Investment testing only if the activity type shows an inherent risk of not being financially additional

The key innovation of the additionality tool is the **evaluation of inherent financial additionality risks** to determine whether an investment analysis is required or not. The aim of this is to prevent that activities of a type whose characteristics make it highly likely additional have to undergo an investment test. The tool stipulates that those activities that cannot prove that they are not generally unattractive in the absence of revenues from the sale of emission credits need to undergo an investment analysis. While the expert team recognises that a mandate to do a financial additionality test for all activities would be the theoretically optimal solution, past experiences have shown that this can lead to unnecessarily high transaction costs for activities that have a low risk of being non-additional. The tool's definition of the different risk categories aims to optimise the trade-off between high transaction costs and the risk of non-additional projects passing the additionality test.

Non-monetary barriers also play a role in the assessment of the inherent financial additionality risk. After taking into account inherent financial additionality risks such as evidence of potential profitability of short payback periods, non-monetary barriers like unavailability of technology or lack of human capacity are considered to draw conclusions on the risk of non-additionality.

Investment analysis – checking external evidence for correctness of parameters used

Step 4 of the additionality tool foresees the **determination of financial additionality through an investment analysis**. The expert team is conscious of the issues regarding gaming of investment test parameters by project proponents in the CDM context and therefore provide specific guidance for investment analysis including the use of conservative default parameters (e.g., for the international rate of return, IRR). Regarding these default parameters, past experience in international carbon markets has shown that there is no universally applicable generic decision-making parameter where no information asymmetry exists. However, practice developed by financial institutions over centuries shows that an assessment of the commercial viability of an activity is possible in the context of decisions to allocate a loan or not. Under most circumstances,

such judgement is valid as the continued existence of private financial institutions shows. An innovation compared to past practice is that the designated operational entities (DOEs) need to check these parameters against external sources such as scientific research and not solely based on numbers provided by project proponents.

The expert team introduced the qualifier "marginally unattractive" if the realistic sensitivity analysis finds that economic parameters of the viable alternative and the mitigation activity overlap. This definition is a new intermediate category that could reduce subjective interpretations and builds on the definition of sensitivity analysis from CDM TOOL01.

While the expert team cautions against the sole use of barrier analysis for determining activities' additionality due to its subjective nature in the CDM context, barrier analysis can be implemented for activities located in LDCs and SIDS if the activity is likely to be attractive without the revenues from credit sales.

Checking regulatory additionality at each crediting period renewal

Regulatory additionality is dynamic in that it changes over time as countries implement new policies, rules, regulations, and laws. For example, a proposed activity may have passed the regulatory additionality tests during the first crediting period but could fail during the second crediting period given underlying changes in regulations. To ensure environmental integrity, it would be ideal to reassess regulatory additionality at frequent intervals, such as annually. However, this imposes administrative burdens and introduces significant uncertainty, thereby potentially preventing proposed activities with the risk of regulatory additionality changing in the near future from moving forward. We therefore chose to **require reassessment of regulatory additionality only at the crediting period renewal** to balance these considerations.

TOOL02: Tool for robust baseline setting

The baseline tool lays out four main steps that project proponents should follow to set the baseline for the mitigation activity: assessing the appropriateness of performance benchmarking; selecting the baseline according to one of the three approaches; adjusting the activity-level baseline to national/sectoral reference scenarios; and regular updates.

Having a clear hierarchy: BAT followed by an ambitious benchmark and then actual/historical emissions adjusted downwards

The first step of **checking the appropriateness of benchmarking** for the sector and sub-sector of the proposed activity implies a hierarchical approach to baseline setting, because first, a best available technology (BAT) approach is considered, before considering an ambitious benchmark or an approach based on actual/historical emissions adjusted downwards. At a general level, the hierarchal structure reduces the opportunity to choose a baseline that results in a higher volume of emissions credits than those achieved by the activity.

More specifically, the hierarchal approach encourages proposed activities to select the most appropriate baseline approach based on the underlying sector and data availability.

For example, a heterogeneous sector does not lend itself to a "best available technology" approach because the sector's diversity precludes any one technology from serving as best available. Similarly, a heterogeneous sector does not lend itself to an "ambitious benchmark" approach because again the sector's diversity precludes an appropriate control group for comparison. For these and other reasons, the tool applies an approach based on existing actual or historical emissions, adjusted downwards, for heterogenous sectors.

This step embodies an implicit hierarchy of the BAT over the ambitious benchmark approach, because BAT often results in more stringent baselines. However, this does not necessarily need to be the case as the benchmark needs to be conservative to make up for its inability to mirror the baseline situation. The historical approach remains available for sectors where benchmarks would have to be highly disaggregated, and their selection would not be straightforward. This hierarchy builds on the experiences under the CDM, where an attempt to generally apply benchmarking failed after 2010 due to the differences in sectoral characteristics.

For homogeneous sectors, the tool adopts a "best available technology" approach where data is sufficiently available. The expert team views this approach as preferable to an "ambitious benchmark" approach because benchmarks may more easily facilitate adverse selection, where firms that would have achieved the benchmark without carbon crediting attempt to opt-in to receive carbon credits.

Reducing baseline emissions intensity over time through a coefficient aligned with the long-term Paris goal

For all baseline setting approaches, **once the baseline is selected** and set, a coefficient with a value below one, the "Paris goal coefficient", must be applied to all baseline emissions values to ensure the baseline's alignment with the Paris Agreement's long-term goal. The "Paris goal coefficient" enhances ambition by ensuring that over time, the baseline emissions intensity will go down. This means that as time passes the volume of carbon credits generated by a specific technology will decline. Activities with a higher carbon intensity will stop generating carbon credits earlier than zero carbon activities. The tool applies the "Paris goal coefficient" to each of the three baseline approaches because none of the approaches guarantees a proposed activity aligns with increasing ambition. The "Paris goal coefficient" would be set at 100% in 2021 and at zero in 2050 for a country whose net-zero target date is 2050. Such a country-level approach to the coefficient is more consistent with the Paris goal than a sector approach as the allocation of a coefficient to a sector cannot be done in a way that allows for accounting objective parameters due to the different sizes and governance requirements of sectors. Aggregation of sectoral targets to make them consistent with global targets has been an insurmountable barrier when sectoral approaches were discussed as alternatives to country-level approaches in the run-up to the Climate Change Conference in Copenhagen in 2009.

Applying the more conservative of the baseline calculated with the tool and the downscaled NDC target

Upon setting the baseline, the **alignment with the NDC unconditional target scenario or sector-specific strategies** needs to be sought. The tool does this alignment via downscaling national targets and/or sectoral strategies to ensure that any proposed activity receiving carbon credits at least does its proportional share of achieving a country's or sector's climate targets. Such adjustment of the baseline is the minimum that needs to be done to not over credit the project.

TOOL03: Tool for monitoring, reporting and verification of emissions, reductions and removals

The four key elements to incorporate in the existing MRV framework to bring it into compliance with Article 6 requirements include: ensuring conservativeness, monitoring of policies, monitoring of reversals and monitoring of sustainable development impacts.

Ensuring conservativeness

Both the Article 6.4 rules and the modalities, procedures and guidelines for the Enhanced Transparency Framework require that accuracy is ensured or promoted. However, sometimes aiming at a high accuracy could result in high costs.

The concept of conservativeness was therefore introduced, aiming at providing a balance between accuracy and costs. Where a more accurate approach to assessing activity reductions or removals leads to prohibitive costs, a less accurate approach can be balanced by ensuring that activity reductions or removals are systematically underestimated. Activities will need to assess the uncertainty of their estimations to apply this concept. Assumptions/methodologies leading to such an underestimation might be applied to the baseline or the monitoring methodology or both, as most appropriate.

Monitoring of policies

Policies implemented in the host country during the crediting period might alter the conditions to be taken into consideration in the baseline. These could relate to technical standards, emission limits, carbon pricing, etc. Which policies might be implemented at which point in time and in which specific form can be difficult to foresee for activity developers. Therefore,

the monitoring tool suggests reviewing relevant new policies every five years. A five-year approach is suggested to reduce costs for the activity developers. The relevant host country institutions are called to support activity developers by actively providing information on forthcoming/implemented policies relevant to the activity baseline.

The review might lead to the need to adjust the baseline for future years. It is however also possible that policies affecting the baseline conditions have been implemented in the years before the review and were not foreseeable during the activity design or the previous review. Where the baseline is adjusted accordingly for past years, this might mean that retrospectively a lower number of credits should have been issued. The monitoring tool suggests a safety approach for this situation: An escrow account is set up into which a certain share of issued credits are transferred each year. The monitoring tool tentatively proposes a share of 10% of credits issued, however, the suitable share might differ for each activity. The credits in the escrow account can be used to balance the number of credits issued for the activity as a whole, in case the baseline has to be adjusted retroactively to a lower level of GHG emissions or a higher level of removals due to policies implemented in past years and where credits for those years have already been issued.

Monitoring of reversals as per best practice in international carbon markets

Long-term monitoring of terrestrial or geologic reservoirs developed under Article 6 is essential to demonstrate permanence of the proposed activity, or, where that permanence is compromised, to ensure that effective measures can be taken swiftly to rectify the situation. Under the CDM, methodologies for afforestation and reforestation did not specify any need for long term monitoring after termination of the crediting period, and monitoring during the crediting period could be undertaken every five years, for example, but credits were issued as temporary units, which failed to gain traction in the carbon markets. To address this issue in the context of CCS, the UNFCCC Decision 10/CMP.7 describing "Modalities and procedures for carbon dioxide capture and storage in geological formations as clean development mechanism project activities" specified that the monitoring of the geological storage site shall ": (b) Be conducted at an appropriate frequency during and **beyond** the crediting period(s) of the proposed project activity; (c) Not be terminated earlier than 20 years after the end of the last crediting period of the CDM project activity or after the issuance of CERs has ceased, whichever occurs first". The approach proposed in this tool aims to reflect the need for long-term monitoring of terrestrial or geologic reservoirs to ensure a high level of confidence in the proposed storage measure, since the removal units will be issued as credits equivalent to those of emission reductions. The rationale behind the stepwise approach is to strike a balance between effective monitoring that will allow rapid identification of any reversals and avoiding potentially prohibitive costs of long-term, in-depth monitoring. Step 1 allows for the identification of potential reversals without the need for high-cost monitoring. Only in the case that a reversal event is identified, is more detailed monitoring, based on a pre-determined monitoring plan, implemented in step 2, which leads to addressing the reversal in step 3. The methodology also specifies who should be responsible for monitoring at all times.

Monitoring of sustainable development (SD) impacts

Rationale for not developing a new sustainable development tool and instead referring to the SD tool being developed by the Article 6.4 Supervisory Body

The II-AMT chose not to develop a sustainable development tool from scratch to avoid duplication of efforts. It has been public knowledge that there is a tool for tracking and monitoring SD impacts under development by the Article 6.4 Supervisory Body, which is anticipated to be made available by the end of 2023. Hence, II-AMT did not see the need to develop another tool.

Rationale for considering only the IFC, World Bank and ESRS standards under the safeguards assessment tool

The IFC performance Standards on Social and Environmental Sustainability and World Bank Environmental and Social Standards have been considered for non-EU countries since these are widely used globally on a broad range of projects and sufficiently cover the social safeguarding aspects that would be of concern from the implementation of any potential Article 6 mitigation activity.

For EU countries, following the European Union Sustainability Reporting Directive (ESRD), all large companies and listed companies are mandated to publish regular reports on the social and environmental risks they face and how their activities (which would include any mitigation activity) impact people and the environment, following the European Sustainability Reporting Standards (ESRS). The standards outline requirements for detailed corporate reporting on a broad range of environmental, social, and governance (ESG) issues.

The three recommended Standards also have ample similarities in terms of the key environmental and social-economic areas considered for assessment as shown below:

Table 1: Comparison of the three recommended safeguards and sustainability standards

IFC Performance Standards on Social and Environmental Sustainability	World Bank Environmental and Social Standards (ESS)	Draft European Sustainability Reporting Standards (ESRS)
Assessment and Management of Environmental and Social Risks and Impacts	ESS1: Assessment and Management of Environmental and Social Risks and Impacts	ESRS 1 - General Requirements
	ESS 10: Stakeholder Engagement and Information Disclosure	ESRS 2- General Disclosures
Performance Standard 2: Labor and Working Conditions	ESS2: Labour and Working Conditions	ESRE S1 - Own Workers
		ESRS S2 - Workers in the Value Chain
Resource Efficiency and Pollution Prevention	ESS3: Resource Efficiency and Pollution Prevention	ESRS E2 - Pollution
		ESRS E3 - Water and Marine resources
		ESRS E5 - Resource use and Circular economy
Community Health, Safety, and Security	ESS4: Community Health, Safety, and Security	ESRS S3 Affected Communities
		ESRS S4 Consumers and End-users
		ESRS E1- Climate Change
Land Acquisition and Involuntary Resettlement	ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement -	N/A
Biodiversity Conservation and Sustainable Management of Living Natural Resources	ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	ESRS E4 Biodiversity
Indigenous Peoples	ESS 7: Indigenous Peoples/ Sub-Saharan African Historically Underserved Traditional Local Communities	N/A
Cultural Heritage	ESS 8: Cultural Heritage	N/A
N/A	ESS 9: Financial intermediaries	N/A
N/A	N/A	ESRS G1 -Business Conduct

Other International Environmental or Sustainability Reporting Standard have been considered, but were not selected as a point of reference, since none other was found relevant for sustainability assessment. For example, the proposed International Sustainability Reporting Standard (ISRS), by the proposed Sustainability Standards Board (SSB) under International Financial Reporting Standard (IFRS) is not yet developed, but its development process may be monitored for its potential future relevance.

Verification guidance

The II-AMT considered that guidance on verification also may be an important element to incorporate in the existing MRV framework, due to the increased need for standardisation of the operations of the verifiers and the need for specific guidance for the new elements included in the tool. However, such guidance remains generic at this stage, but may be elaborated once agreement is reached on the nature of each of the new elements that allows for definition of verification needs.

GUIDE01: Guidance for evaluating mitigation activities' links to the host country's NDC and LT-LEDS

The NDC guidance was developed to address questions around the alignment of Article 6 mitigation activities with host countries' Nationally Determined Contributions (NDC) and Long-term Low Emissions and Development Strategies (LT-LEDS). Such alignment is called for in the rules and principles agreed for Article 6.4, and would be important as well for Article 6.2 activities. However, these questions are non-methodological in nature, and therefore not addressed in the tools related to additionality, baselines, and MRV. Specifically, the NDC guidance is intended to provide information to support authorisation by the host country of an activity's mitigation outcomes, based on whether the activity: (1) is likely to be surplus to the host country's unconditional NDC; and (2) contributes to, and is aligned with, achievement of the host country's NDC and LT-LEDS.

Under several scenarios, authorising the transfer of mitigation outcomes could compromise a host country's ability to achieve its NDC. These include authorising mitigation achieved outside the scope of a country's NDC (conditional or unconditional); authorising mitigation that is not visible in the GHG inventory used to assess unconditional NDC progress; authorising mitigation that can reasonably be expected to be part of the country's own measures to reach its unconditional NDC. In general, host countries can be expected to avoid authorisation under the first two scenarios when they are aware of them. The NDC guidance therefore focuses on the third scenario, where determination of what is **surplus** to the host country's expected efforts to achieve its unconditional NDC may be difficult, or subject to uncertainty. The NDC guidance offers practical options for assessing whether a mitigation activity is likely to be "target surplus" according to this framing, which may be applied by activity developers when seeking authorisation.

In the same vein, the **NDC guidance outlines practical approaches that may be applied by host countries to ensure that mitigation activities contribute to the achievement of the host country NDC and LT-LEDS.** These include options for limiting crediting periods or requiring baseline adjustments, which may be considered in the application of the other tools as part of methodological design (e.g., baseline setting and MRV), but are otherwise not directly related to Article 6.4 methodological requirements. The guidance also discusses non-methodological options, including negotiation around the share of mitigation outcomes that may be authorised and transferred.

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