A6.4-SB010-AA-A05

Draft Tool

Article 6.4 sustainable development tool

Version 04.0



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COVER NOTE

1. Procedural background

- 1. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA), at its third session, requested the Supervisory Body of the mechanism established by Article 6, paragraph 4, of the Paris Agreement (Article 6.4 mechanism) Supervisory Body to review the sustainable development tool in use for the clean development mechanism (CDM SD tool) and other tools and safeguard systems in use in existing market-based mechanisms to promote sustainable development with a view to developing similar tools for the mechanism established by Article 6, paragraph 4, of the Paris Agreement (hereinafter referred to as the Article 6.4 mechanism by the end of 2023¹.
- 2. Decision 3/CMA.3, annex, paragraphs 24(a)(x) and 24(a)(xi), requests the Supervisory Body to establish the requirements and processes necessary to operate the Article 6.4 mechanism, relating to, inter alia, the application of robust, social and environmental safeguards and the development of tools and approaches for assessing and reporting information about how each activity is fostering sustainable development, while acknowledging that the consideration of sustainable development is a national prerogative.
- 3. At its fourth meeting, the Supervisory Body considered the concept note "Workplan for developing a sustainable development tool for the mechanism established by Article 6, paragraph 4, of the Paris Agreement" and requested the secretariat to develop a sustainable development tool for the Article 6.4 mechanism (A6.4 SD tool) and present a draft A6.4 SD tool at its seventh meeting for its consideration, taking into account to:
 - (a) Make the use of the A6.4 SD tool mandatory, and include provisions on the use of the tool in the activity standards, validation and verification standards and/or cycle procedures, as appropriate;
 - (b) Design the A6.4 SD tool to allow users to take into account specific sustainable development objectives of each host Party, which are national prerogatives;
 - (c) Reflect both the positive and negative sustainable development impacts of activities using quantitative and/or qualitative indicators;
 - (d) Conduct further review of other bilateral and multilateral market-based mechanisms that currently use sustainable development tools; and
 - (e) Connect to the Sustainable Development Goals (SDGs) by considering their timeframe.
- 4. The Supervisory Body requested the secretariat to present the outcomes of the activities mentioned in paragraphs 2 and 3 above and to present a draft A6.4 SD tool at its seventh meeting for consideration. However, during the review of other bilateral and multilateral market-based mechanisms that currently use sustainable development tools and surveys with related stakeholders, the secretariat came across two aspects for which further

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guidance from Supervisory Body was required for the further development of the draft A6.4 SD tool, in particular whether the sustainable development contributions should be bottom-up or top-down and whether environmental and social safeguard requirements should be with or without a safeguard communication channel maintained by activity participants with local stakeholders during the entire crediting period of an activity.

- 5. At its seventh meeting, the Supervisory Body considered the concept note "Development of a sustainable development tool for Article 6.4 of the Paris Agreement" and the outline of a draft A6.4 SD tool circulated during the meeting. The Supervisory Body requested the secretariat to prepare a draft A6.4 SD tool, taking into account the following Supervisory Body guidance, for consideration at the next meeting:
 - (a) Provide options to assess the positive and negative impacts of activities on the SDGs, targets and/or indicators of the host Party;
 - (b) Clarify the relationship between activity-level sustainable development indicators and environmental and social indicators;
 - (c) Revise steps for developing activity-level sustainable development indicators consistent with the SDGs, targets and/or host party indicators;
 - (d) Consider monitoring descriptions/requirements for sustainable development indicators in the context of the rules, modalities and procedures for the Article 6.4 mechanism;
 - (e) Provide relevant safeguards necessary to avoid and/or minimize negative environmental and social impacts on activities involving emission reductions and/or removals, reflecting the latest decisions and discussions at Supervisory Body with a view to fulfilling the mandate in paragraph 5 (c) of decision 3/CMA.3;
 - (f) Provide separate module/guiding questions for REDD+ projects/AFOLU/Cancun safeguards;
 - (g) Provide a clear explanation on how the designated operational entity is meant to validate and verify sustainable development contributions and safeguards, which may require the development of relevant guidance on specific principles:
 - (h) Reflect balance between host party priorities and safeguards principles;
 - (i) Balance framing of guiding questions under safeguards.
- 6. The Supervisory Body further agreed that an informal working group on this matter comprising its members and alternate members will review the draft sustainable development tool prepared by the secretariat, for consideration of the Supervisory Body at the next meeting.
- 7. During its eighth meeting, the Supervisory Body provided guidance to the draft A6.4 SD tool and requested the secretariat to launch a call for public inputs, and prepare a revised version to the draft, taking into account the comments received from the call for inputs, and present it at the tenth meeting.

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2. Purpose

- 8. This document presents the revised draft A6.4 SD tool based on the Supervisory Body guidance provided at its seventh and eighth meeting and input received during a call for public inputs as below:
 - (a) A total of 12 submissions comprising 480-177 inputs¹ to various paragraphs of the tool have been received from international organizations, NGOs, DNAs, etc, which have been compiled, reviewed and considered in this version of the tool.
 - (b) Based on the decision at SB 007 referred in the paragraph 3(e) and (f) above, the secretariat has included appendix I and II to this tool in order to provide i) separate module/guiding questions for REDD+ projects/AFOLU/Cancun safeguard and ii) the relevant safeguard options necessary to avoid and/or minimize negative environmental and social impacts on activities involving emission reductions and/or removals.

3. Impacts

9. The A6.4 SD tool will form the regulatory basis for the operationalization of the Article 6.4 mechanism.

4. Subsequent work and timelines

10. Based on the decision taken at its tenth meeting, the Supervisory Body may request the secretariat to further revise and present a draft A6.4 SD tool at the next meeting for its adoption. However, if the Supervisory Body opts for option 2 as per paragraph 11 (c)(ii) below, the revision of the draft A6.4 SD tool may only be commenced once the Supervisory Body defines the types of CO₂ carbon dioxide removals activities.

5. Recommendations for the Supervisory Body

- 11. Based on the decision of the Supervisory Body at it seventh and eighth meeting and the review of inputs, the secretariat recommends that the Supervisory Body consider and provide further guidance to the draft A6.4 SD tool regarding:
 - (a) Demonstration of sustainable development contribution based on the options presented below:
 - (i) Option A: Request activity participant to demonstrate both positive and negative impacts against the 17 SDGs as proposed in the draft A6.4 SD tool Version 02.0; or
 - (ii) Option B: Request activity participant to demonstrate positive impacts against the 17 SDGs.
 - (b) The revised draft A6.4 SD tool including the draft principles, criteria, and guiding questions for environmental and social safeguards for REDD+ based on REDD+ Cancún Safeguards principles referred to appendix 1 of this tool.

¹ The submissions are available at https://unfccc.int/process-and-meetings/the-paris-agreement/article-64-mechanism/calls-for-input/call-for-input-2023-stakeholder-interactions-sustainable-development-tool.

- (c) Safeguard options necessary to avoid and/or minimize negative environmental and social impacts on activities involving removals, specifically CO₂ carbon dioxide removals activities referred to appendix 2 of this tool:
 - (i) Option 1: Adoption of existing draft A6.4 SD tool safeguards criteria and guiding questions to be applied for CO₂ carbon dioxide removals activities; or
 - (ii) Option 2: Creation of new specific annex(es) to the draft A6.4 SD tool to include safeguards criteria and guiding questions specific to CO₂ carbon dioxide removals activities once the Supervisory Body defines the types of CO₂ carbon dioxide removals activities.

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1 Introduction

1. The Supervisory Body of the mechanism established by Article 6, paragraph 4, of the Paris Agreement (the Article 6.4 mechanism), at its Xth meeting, approved the Article 6.4 sustainable development tool (A6.4 SD tool).

2 Scope, applicability and entry into force

2.1 Scope

- 2. The Article 6.4 sustainable development tool (hereinafter referred to as the A6.4 SD Tool) provides a step-wise approach for activity participants to assess, demonstrate, manage ing_and monitor potential negative environmental and social impacts and potential positive [and negative] contributions to the Sustainable Development, by Article 6.4 Activities and/or A6.4 PoA (hereafter "activity" or "activities" refers to activity, Article 6.4 Activities and/or A6.4 PoA).
- 3. The A6.4 SD tool requires an activity participant to identify and evaluate potential risks and adverse outcomes of the proposed activities and to adopt mitigation strategies to avoid or, where avoidance is not possible, minimize identified risks—to meet the requirements in the A6.4 SD tool to provide evidence that the activities are consistent with host country regulations and/or relevant standards, best practices and obligations.
- 4. While sustainable development contributions by the proposed activities shall be confirmed by the host country in the letter of approval (LoA), activity participants are required to demonstrate how the proposed activities contribute to Furthermore, it requires an activity participant to identify and demonstrate potential positive and negative impacts on sustainable development by applying the A6.4 SD Tool. for monitoring throughout its crediting period.
- 5. This tool is divided into three sections:
 - (a) **Environmental and social safeguards**: These safeguards aim to identify, mitigate and minimize adverse/negative environmental and social impacts that may arise during the implementation of an activity.
 - (b) **Sustainable development** Hmpact. This section focuses on the assessment, demonstration, and monitoring of an activity's impact to sustainable development.
 - (c) **Validation and verification**: This section provides additional requirements to the VVS-P/PoA to be considered by the DOEs during the validation and verification stages.
- 6. The results of the assessment of the environmental and social safeguards shall be reflected in the A6.4 Environmental and Social Safeguards Risk Assessment Form and the A6.4 Environmental and Social Management Plan Form, and the evaluation of sustainable development contribution(s) impact shall be reflected in the A6.4 Sustainable Development Tool Form. and shall—These forms must be shared during the local stakeholder consultation, in accordance with host Party rules and/or the Article 6.4 mechanism activity cycle procedures and the Article 6.4 mechanism activity standards.

- 7. Based on inputs received from local stakeholder consultation, activity participants may revise/update the A6.4 Environmental and Social Safeguards Risk Assessment Form, the A6.4 Environmental and Social Management Plan Form and the A6.4 Sustainable Development Tool Form and shall submit them to a DOE for validation.
- 8. The validated A6.4 Environmental and Social Safeguards Risk Assessment Form, the A6.4 Environmental and Social Management Plan and A6.4 the Sustainable Development Tool Form shall be part of the registered activity documentation and will be used for ex-post monitoring during the crediting period and shall be verified by a DOE during each request for issuance of Article 6.4, emission reductions [A6.4 ERs].
- 9. Activity participants and stakeholders may submit any issue related to compliance of this tool through the local stakeholder consultation, global stakeholder consultation and continuous engagement of stakeholders as defined in Article 6.4 activity standard, and appeal and grievance processes under the Article 6.4 mechanism.

2.2 Applicability

- 10. The use of the A6.4 SD tool is mandatory for all for the transition of the eligible CDM activities to the Article 6.4 mechanism and for the proposed Article 6.4 activities to identify, evaluate potential risks and adverse outcomes, adopt risk mitigation measures and demonstrate their impacts on sustainable development. This includes mandatory use for all interested CDM activities to be eligible for transition to the Article 6.4 mechanism. The A6.4 SD tool and its three forms² provides:
 - (a) Environmental and social safeguards principles, criteria, and risk assessment requirements and action plans for the mitigation of risks and impacts.
 - (b) Guidance for identifying the sustainable development [contribution] [impact] of proposed Article 6.4 mechanism activities and CDM activities transitioned to the Article 6.4 mechanism.
 - (c) Steps for determining the Sustainable Development Goals (SDGs)³ impacted by the proposed activity, taking into consideration the host countries' sustainable development objectives.
 - (d) Principles for establishing sustainable development monitoring indicators based on the SDGs and their targets.
 - (e) Requirements for DOEs to be considered under the validation and verification processes.

2.3 Entry into force

11. Version 01.0 of the A.6.4 SD tool enters into force on DD Month YYYY.

² Three forms include: the A6.4 Environmental and Social Management Plan form, A6.4 Environmental and Social Management Plan form and the A6.4 Sustainable Development Tool form.

Available at: https://www.un.org/sustainabledevelopment/blog/2015/09/historic-new-sustainabledevelopment-agenda-unanimously-adopted-by-193-un-members/.

3 Normative references

- 12. The following referenced documents are indispensable for the application of this tool:
 - (a) United Nations 17 Sustainable Development Goals (17 SDGs)⁴;
 - (b) Article 6.4 mechanism activity standard for activities (ACP-P);
 - (c) Article 6.4 mechanism activity standard for programmes of activities (AS-PoA);
 - (d) Article 6.4 mechanism validation and verification standard for activities (VVS-P);
 - (e) Article 6.4 mechanism validation and verification standard for programmes of activities (VVS-PoA);
 - (f) Article 6.4 mechanism activity cycle procedure for activities (ACP-P);
 - (g) Article 6.4 mechanism activity cycle procedure for programmes of activities (ACP-PoA);
 - (h) Article 6.4 appeal and grievance processes under the Article 6.4 mechanism.

4 Definitions

- 13. In addition to the definitions found in the "Glossary: Article 6.4 mechanism terms", the following terms are applicable in this procedure:
 - (a) Sustainable Development Goals (SDGs): The 17 SDGs build upon the successes of the Millennium Development Goals while incorporating new areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among other priorities.
 - (b) Activity-level SD indicators: These are activity-specific indicators aligned with the UN Sustainable Development Goals, used to monitor the Sustainable Development (SD) contribution of an Art 6.4 activity, and sustainable development objectives, as defined by a host party, that are required to be specified in the "A6.4 Seustainable Development form". Examples of activity-level SD indicators for a cookstove distribution activity may include:
 - (i) The number of improved cookstoves (ICS) distributed under the activity, serving as an indicator for providing basic service access to households under SDG 1, target 1.4.
 - (ii) The percentage of users reporting a reduction in smoke/PM after shifting to ICS within the activity, addressing SDG 3, target 3.9.

https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%202023%20refinement_Eng.pdf

⁴ Available at:

- (iii) The percentage of users reporting time savings due to reduced fuel consumption or cooking time within the activity, related to SDG 5 and its target 5.4; and/or
- (iv) The average percentage of fuel savings reported by users within the activity, pertaining to SDG 12 and its target 12.2.
- (c) Activity-level environmental and social indicators: activity specific indicators identified during "Do-No-Harm Risk Assessment" that are required to be defined in "A6.4 Environmental and Social Management Plan". Examples of activity-level environmental and social indicators for afforestation or reforestation activity may include mitigation measures to compensate tenants for land and to relocate the lands to a different part of the concession.
- (d) Sustainable development objectives of a host country: sustainable development objectives or indicators defined by host countries.
- (e) A6.4 Environmental and Social Management Plan: a management tool that details the set of mitigation measures and monitoring to be taken during its entire crediting period to eliminate adverse unintended⁵ environmental and social impacts, offset them, and/or reduce them to acceptable levels as per host country regulations applicable to the proposed activity.
- (f) Direct impact: an impact which is based on direct contribution/interaction by an activity with an environmental, social or economic component during the crediting period.
- (g) Cultural heritage: 6 artefacts, monuments, a group of buildings and sites and/or museums that have a diversity of values, including symbolic, historic, artistic, aesthetic, ethnological or anthropological, scientific, and social significance. It includes tangible heritage (movable, immobile, and underwater), intangible cultural heritage (ICH) embedded into cultural, and natural heritage artefacts, sites or monuments. The definition excludes ICH related to other cultural domains, such as festivals, celebrations, etc.
- (h) Indigenous Peoples: inheritors and practitioners of unique cultures and ways of relating to people and the environment. They have retained social, cultural, economic and political characteristics that are distinct from those of the dominant societies in which they live.
- (i) Gender equality: 8 is required to work for the elimination of discrimination against women and girls; empowerment of women; and achievement of

⁵ Not intentional; happening unexpectedly or by accident. Source: Cambridge Dictionary

⁶ https://uis.unesco.org/en/glossary-term/cultural-heritage.

https://www.un.org/development/desa/indigenouspeoples/aboutus.html#:~:text=%E2%80%9CIndigenous%20communities%2C%20peoples%20and%20nations%2 0are%20those%20which%2C%20having,territories%2C%20or%20parts%20of%20them.

https://www.un.org/youthenvoy/2013/07/un-women-the-united-nations-entity-for-gender-equality-and-the-empowerment-of-women/#:~:text=elimination%20of%20discrimination%20against%20women,action%20and%20peace%20and%20security.

- equality between women and men as partners and beneficiaries of development, human rights, humanitarian action, and peace and security.
- (j) Child labour: work that is inappropriate for a child's age, affects children's education, or is likely to harm either their health, safety or morals.
- (k) Generic assessments: conclusion provided by the activity participant in regard to the proposed activity alignment with host country regulatory requirements applicable to the proposed activity for transparency and compliance purposes.
- (I) Host country regulations: whether any regulatory requirements are applicable to the proposed activity established by the host country.
- (m) Stakeholders: The public, including individuals, groups or communities affected, or likely to be affected, by the proposed Art 6.4 activity or PoA, or actions leading to the implementation of such an activity.

5 Environmental and social safeguards

- 14. The implementation and operation of an activity may cause negative social and environmental impacts. Environmental and social safeguards help an activity developer to identify, evaluate, prevent and mitigate unintended negative environmental and social impacts and risks produced by an activity in its environment during implementation and operation.
- 15. In addition to the requirements of the Validation and Verification Standard, Activity Cycle Procedure and Activity Standard listed in section 3 related to compliance with legal and regulatory requirements of the host country, activity participants are required to document in the activity form [project design document (PDD)] that their proposed activities do not cause any environmental and/or social harm by completing the A6.4 Environmental and Social safeguards risk assessment form and the A6.4 Environmental and Social Management Monitoring Plan Form for addressing environmental and/or social risks identified in A6.4 Environmental and Social Seafeguards Risk Aessessment Fform. While an activity is expected to comply with host country regulations applicable to the proposed activity, the outcome of the assessment of environmental and social safeguards (A6.4 Environmental and Social Safeguards Risk Assessment Do-No-Harm Risk Assessment and A6.4 Environmental and Social Management Plan) shall be shared at the local stakeholder consultation.
- 16. [If a proposed activity falls under the category of REDD+ according to paragraph 71 of decision 1/CP.16, the activity participant shall follow the safeguards referred to Appendix 1 of this tool which is based on in-paragraph 2 of appendix I of decision 1/CP.16 and, when applicable, the safeguards guidelines submitted by Parties (available on the UNFCCC REDD+ WEB Platform)].
- 17. This section provides the process for activity participants to assess potential negative social and environmental impacts, which may be caused by their activity, against the environmental and social safeguard principles/criteria:
 - (a) The activity participant shall conduct a Do-No-Harm Risk Assessment to identify possible negative environmental and social impacts—from the construction and operation and decommissioning, if applicable, of the activity against eleven principles under the environmental safeguards and the social safeguards defined in section 5.1 and 5.2 below using the A6.4 Environmental

and Social safeguards Rrisk Aassessment Fform by answering the principle level question(s) under guiding question tables of each principles in section 5.1 and 5.2. These eleven principles are common principles observed from other international financial institutions, other UN agencies and voluntary carbon market systems⁹¹⁰¹¹¹²¹³¹⁴¹⁵¹⁶;

- (b) If an activity participant identifies that its activity has an impact on principles under the environmental and social safeguards, the activity participant shall conduct further assessment against principles according to the host country legal/regulatory requirements applicable to the proposed activity type. If host country does not have legal/regulatory requirements on one of eleven principles, the activity participant may apply the criteria and guiding questions of the principles that are identified by an activity in step (a) above using the A6.4 Environmental and Social Seafeguards Reisk Aassessment Fform:
 - (i) The assessment shall compare the activity scenario to the baseline scenario(s);
 - (ii) The assessment shall consider the following safeguard principles and criteria defined in the section 5.2 and 5.3 below. The activity participant may determine the severity level based on possible responses in Table 1 below to the individual criteria and guiding questions;
 - (iii) The activity participant is requested to provide the level of severity to as part of the do-no-harm risk assessment, for each identified principle;
 - (iv) The principles' severity level is classified as per table 1:17

⁹ Gold Standard (2023) Safeguard Principles & Requirements. Available at: https://globalgoals.goldstandard.org/standards/103 V2.0 TC PAR Safeguarding-Principles-Requirements.pdf

¹⁰ GCF (2023). Environmental and social safeguards. https://www.greenclimate.fund/activity/sustainability-inclusion/ess

¹¹ UNEP (2020). UNEP environmental, social and sustainability framework. Available at: https://www.unep.org/resources/report/un-environments-environmental-social-and-economic-sustainability-framework

World Bank (2016). Environmental and Social Framework (ESF). Available at: https://www.worldbank.org/en/activity-operations/environmental-and-social-policies

FAO (2022). Framework for Environmental and Social Management. Available at: https://www.fao.org/3/cb9870en/cb9870en.pdf

¹⁴ GCC (2022). Environment and Social Safeguards Standard. Available at: https://www.globalcarboncouncil.com/wp-content/uploads/2022/09/Environment-and-Social-Safeguards-Standard.V3.0-1. <a href="https://www.globalcarboncouncil.com/wp-content/uploads/2022/09/Environment-and-Social-Safeguards-Standard.V3.0-1. <a href="https://www.globalcarboncouncil.com/wp-content/uploads/2022/09/Environment-and-social-Safeguards-Standard-Wall-and-social-Safeguards-Standard-Wall-and-social-Safeguards-Standard-Wall-and-social-Safeguards-Standard-Wall-and-social-Safeguards-Standard-Wall-and-social-Safeguards-Standard-Wall-and-social-Safeguards-Safeguards-Notal-

¹⁵ IADB (2020). Environmental and Social Policy Framework. Available at: https://blogs.iadb.org/sostenibilidad/en/espf-environmental-and-social-policy-framework-in-a-nutshell/

WWF (n.d.). Environmental and Social Safeguards (ESS). Available at: http://assets.worldwildlife.org/publications/844/files/original/SafeguardsonepagerFINAL.pdf

¹⁷ Guiding questions may or may not include all possible response options due to the nature of the questions and expected response.

Table 1. Possible responses in the do-no-harm risk assessment for principle level questions and additional guiding questions

Response	Description	Guidance
Yes	If negative impacts exist for certain principles or if the activity, during its operations, fails to meet the national legal/regulatory requirements or is likely to fail in meeting the legal/regulatory requirements, they will be marked as "yes" as they are likely to cause harm (and may be unsafe).	All negative impacts shall be included in the A6.4the environmental and social management plan. In case of lack of legal/regulatory requirements of the host party, the activity participant may take industry best practices or voluntary corporate policies of the organization to assess if the aspects are harmful.
Potentially	This means that the risk or expected issue may be relevant at some point in the activity's cycle, but is not necessarily relevant now and/or may never arise.	The requirements apply but the activity may justify with evidence why these requirements do not need to be demonstrated as being met. The activity shall update information on any assessment questions answered with 'potentially' for each monitoring report.
No	This means that the risk or expected issue is not relevant to the activity.	Justification shall be provided to support this conclusion, with evidence provided where required.
NA	This means that the question is not relevant to the activity and its potential impact.	Activity participant is required to justify exclusion of any principles. No action is needed.

- (c) Based on the outcome of the do no harm risk assessment, the activity participant shall develop A6.4 Environmental and Social Management Plan in order to reduce and address identified/potential negative impacts. It will define and provide:
 - (i) Desired outcomes and actions to address and mitigate potential negative environmental and social impacts in the do-no-harm risk assessment process;
 - Monitoring parameters and acceptance criteria that can be tracked over activity crediting periods, and with estimates of the resources and responsibilities for implementation, to demonstrate that the impacts do not cause harm to the environment or society;
 - (iii) Indicators that can be used to monitor environmental and social aspects in the A6.4 Environmental and Social Management Plan may be quantitative or qualitative in nature;

- (iv) Safeguard communication channel maintained by activity participants to offer local stakeholders¹⁸ an effective avenue for expressing concerns and achieving remedies and promote a mutually constructive relationship during the activity crediting period. Such process shall be established as part of the process for continuous engagement of local stakeholders in accordance with the "Article 6.4 activity standard for projects" or the "Article 6.4 activity standard for programmes of activities;
- (d) Activity participants are required to propose measures and actions to address identified/potential negative impacts in accordance with the host country regulatory requirements applicable to the proposed activity;
- (e) A6.4 Environmental and Social Management Plan shall be validated by a designated operational entity (DOE) during registration, and the outcome of monitoring for a monitoring period as per A6.4 Environmental and Social Management Plan, including any records of a safeguard communication channel, shall be verified by a DOE.

5.1 Environmental and social safeguards principles

18. The environmental and social safeguards principles are shown in table 2 below. The definition of each principle and relevant criteria are introduced in section 5.2 below.

Table 2. Environmental and social safeguards principles - 19,20,21,22

Safeguard principles				
Environmental Principle 1 Climate and Energy				
Principle 2 Air, land and wa		Air, land and water		
	Principle 3	Ecology and natural resources		
Social	Principle 4	Human rights		
	Principle 5	Labour		
	Principle 6	Health and safety		
	Principle 7	Gender equality		
	Principle 8	Land acquisition and involuntary resettlement		
	Principle 9	Indigenous People <mark>s</mark>		
	Principle 10	Corruption		

¹⁸ Local Stakeholders: The public, including individuals, groups or communities affected, or likely to be affected, by the proposed Art 6.4 activity or PoA, or actions leading to the implementation of such an activity.

¹⁹—Gold Standard (2023). Safeguarding Principles & Requirements.

²⁰⁻Global Carbon Council (GCC) (2022). Environmental and Social Safeguards Standards (ver. 3.0). Available at: https://www.globalcarboncouncil.com/wp-content/uploads/2022/09/Environment-and-Social-Safeguards-Standard.V3.0-1-pdf.

²⁴⁻World Bank (n.a.) Environmental and Social Standards (ESS). Available at: https://projects.worldbank.org/en/projects-operations/environmental-and-social-framework/brief/environmental-and-social-standards.

²²-IADB (2020). Environmental and Social Policy Framework. Environmental and Social Performance Standard 4: Community Health, Safety, and Security. Available at: https://blogs.iadb.org/sostenibilidad/en/espf-environmental-and-social-policy-framework-in-a-nutshell/.

Safeguard princ	iples	
	Principle 11	Cultural heritage

5.2 Environmental safeguards principles and criteria

5.2.1 Principle 1: Climate and energy

19. Principle 1 stipulates The proposed activity shall not increase greenhouse gas (GHG) emissions over the baseline scenarios (unless this is specifically allowed by the applied/approved Article 6.4 methodology). Activities shall also not affect the availability and reliability of the energy supply to other users. 23

Principle 1 (Climate and energy) criteria:

- 20. P1.1: Climate: Activity shall not increase GHG emissions over the baseline scenario unless this is specifically allowed within the activity-applicable approved methodology.
- 21. P1.2: Energy: Activity shall not affect the availability and reliability of the energy supply to other users.

Table 3. Guiding questions for the do-no-harm risk assessment on climate and energy

P 1 Climate	e and energy (Climate)	Host country regulations	Generic risk assessments
Principle level question	Does the proposed A6.4 activity have a risk of expect to increaseing greenhouse gas (GHG) emissions over the baseline scenario? (If yes or potentially, please respond to the additional guiding questions)	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Additional	guiding question:			
P1.1	If yes above, Does the proposed A6.4 activity have any risksis the increasinge of the of GHG emissions over the baseline scenario in the step of the of GHG emissions over the baseline scenario in the the step of the step of the of the other than the step of the other than the step of the the step of the the step of the other than the step of the step o	☐ Yes ☐ Potentially ☐ No ☐ N/A		

²³-Gold Standard (2023) Safeguarding Principles & Requirements.

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P 1 Climate	and energy (Climate)	Host country regulations	Generic risk assessments
	compliance that arenot considered under—with— Article 6.4 approved applied methodology?			
P 1 Climate	and energy (Energy)		Host country regulations	Generic risk assessments
P1.2 Principle level question	Does the proposed A6.4 activity pose a risk to the availability and reliability of the energy supply to other users? (If yes or potentially, please respond to the additional guiding questions)	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Additional	guiding question			
P1.2	Does the proposed A6.4 activity result in or lead to negative ²⁴ impacts on the availability and reliability of the energy supply to other users?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Conclusion (Climate an	of the do-no-harm d energy):	risk assessmen	t on principle 1	☐ Yes ☐ Potentially ☐ No ☐ N/A

For example: if the proposed activity intends to consume high amount of energy that might result into overload exiting energy supply.

5.2.2 Principle 2: Air, land and water 25

Proposed activity shall avoid to release pollutants to air, land and water, this includes Principle 2 refers to hazardous and/or non-hazardous pollutants in the solid, liquid or gaseous phases, and includes other components such as thermal discharge to water, emissions of short-lived and long-lived climate pollutants, plastics, biomedical waste, nuisance odours, noise, vibration, radiation, electromagnetic energy, water consumption and water discharge, and the creation of potential visual impacts, including light. ²⁶

Principle 2 (Air, land and water) criteria:

P2.1 Air

- 23. P2.1.1: The activity participant shall avoid the release of pollutants or, when avoidance is not feasible, minimize and/or control the intensity and mass flow of their release in accordance with host country regulations. This applies to the release of pollutants due to routine, non-routine, and accidental circumstances with the potential for local, regional and transboundary impacts.
- 24. P2.1.2: Where historical pollution ²⁷— such as air contamination exists, the activity participant shall seek to determine whether it is responsible for mitigation measures. If it is determined that the activity participant is legally responsible, then these liabilities will be resolved in accordance with national law, or where this is silent, in coordination with national and local government agencies, communities, and the contributors to the contamination. Activity participants can use historical records, ongoing monitoring, and reporting through data logging of physical measurements, online sources and government data.

Table 4. Guiding questions for the do-no-harm risk assessment on air

P2 Air			Host country regulations	Generic assessment	risk
Principle level question	DoesWould the proposed A6.4 activity involvelead to the release of air pollutants due to routine and nonroutine activities, with the potential for local, regional and	☐ Yes ☐ Potentially ☐ No ☐ N/A			

²⁵⁻GCC (2022). Environmental and Social Safeguards Standards (ver. 3.0). Available at https://www.globalcarboncouncil.com/wp-content/uploads/2022/09/Environment-and-Social-Safeguards-Standard.V3.0-1_.pdf.

^{26—}World Bank (n.a.). Environmental and Social Standards (ESS). ESS3: Resource Efficiency and Pollution Prevention and Management. Available at: https://documents1.worldbank.org/curated/en/112401530216856982/ESF-Guidance-Note-3-Resource-Efficiency-and-Pollution-Prevention-and-Management-English.pdf.

²⁷ Historical pollution refers to any level of effect into air, soill and water not consistent with host country regulations and/or relevant standards, best practices and obligations in the site where the proposed activity will take place.

P2 Air			Host country regulations	Generic assessment	risk
	transboundary impacts? If yes or potentially, please respond to guiding question P2.1.1				
Principle level question	Is the proposed A6.4 activity located in an area where historical pollution such as air contamination exists? If yes or potentially, please respond guiding question P2.1.2	☐ Yes☐ Potentially☐ No☐ N/A			
•	uiding question: entially above, please o	complete the ques	tions below <mark>:-</mark>		
P2.1 <mark>.1</mark>	Does the proposed A6.4 activity have any risks of the Does the activity avoid the release of air pollutants that cannot be , or when avoidance is not feasible, minimized and/or controlled in the terms of intensity and mass flow of their release in accordance with host country regulations? This applies to the release of pollutants due to routine, non-routine and accidental circumstances with the potential for local, regional and transboundary impacts.	☐ Yes ☐ Potentially ☐ No ☐ N/A			

P2 Air			Host country regulations	Generic risk assessment
P2.1 <mark>.1</mark>	Does the proposed A6.4 activity have a risk of releasing pollutants into the air in routine, non-routine, or accidental circumstances with the potential for local, regional, and transboundary impacts?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P2.1 <mark>.2</mark>	Does the proposed A6.4 activity have any risk of continuing Does the activity involve or lead to any potential risk of pollutant release that cannot be avoided? historical pollution such as air contamination not in accordance with host country regulations where the activity participant is legally responsible for mitigation measures?.	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Conclusion of and water) –	l of the do-no-harm risk a · Air:	l assessment on pri	l inciple 2 (Air, land	☐ Yes☐ Potentially☐ No☐ N/A

P2.2 Land²⁸

25. P2.2.1: The proposed activity The activity participant—shall avoid the release of pollutants or, when avoidance is not feasible, minimize and/or control the intensity and mass flow of their release in accordance with host country regulations. This applies to

²⁸ Land considers land, soil and subsoil and surfaces.

- the release of pollutants due to routine, non-routine and accidental circumstances with the potential for local, regional and transboundary impacts.
- 26. P2.2.2: Where historical pollution such as land contamination exists, the activity participant shall seek to determine whether it is responsible for mitigation measures. If it is determined that the activity participant is legally responsible, then these liabilities will be resolved in accordance with national law, or where this is silent, in coordination with national and local government agencies, communities, and the contributors to the contamination. Activity participants can use historical records, ongoing monitoring, and reporting through data logging of physical measurements, online sources and government data.
- 27. P2.2.3: The activity shall demonstrate that measures will be undertaken to ensure that the soil and land use, as well as surface and groundwaters are protected from erosion and that these measures are in place prior to the commencement of the activity.
- 28. P2.2: The activity shall demonstrate that measures to ensure soil protection and minimized erosion are in place prior to the commencement of the activity.
- 29. P2.2.4: The activity shall identify the functions and services provided by the landscape and demonstrate no net-degradation of soil resources and loss of ecosystem services provided by soils.
- 30. P2.2.5: Activities that involve the production, harvesting and/or management of living natural resources by small-scale landholders and/or local communities shall adopt appropriate and culturally sensitive sustainable resource management practices.

Table 5. Guiding questions for the do-no-harm risk assessment on land

P2 Land			Host country regulations	Generic risk assessment
Principle level question	DoesWould proposed A6.4 activity lead to the release of land pollutants due to routine and non-routine activities, with the potential for local, regional and transboundary impacts? If yes or potentially, please respond to guiding questions P2.2.1, P2.2.3, P2.2.4 and P2.2.5	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Principle level question	Is the proposed A6.4 activity located in an area where historical pollution such as			

P2 Land			Host country regulations	Generic risk assessment
	land contamination exists? If yes or potentially, please respond to guiding questions P2.2.2, P2.2.3 and P2.2.4.			
	uiding question: entially above, please co	omplete the question	ons below.	
P2.2 <mark>.1</mark>	Does the proposed A6.4 activity have any risk of avoid the the release of land pollutants or, when avoidance is not feasiblethat cannot be, minimized and/or controlled in terms of the intensity and mass flow of their release in accordance with host country regulations? This applies to the release of pollutants due to routine, non-routine and accidental circumstances with the potential for local, regional and transboundary impacts.	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P2.2 <mark>.1</mark>	Does the proposed A6.4 activity have a risk of releasing pollutants to land in routine, non-routine or accidental circumstances with the potential for local, regional, and transboundary impacts.?	☐ Yes ☐ Potentially ☐ No ☐ N/A		

P2 Land			Host country regulations	Generic risk assessment
P2.2 <mark>.2</mark>	Does the proposed A6.4 activity have any risk of continuing historical pollution such as air contamination not in accordance with host country regulations where the activity participant is legally responsible for mitigation measures?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
	Does the activity involve or lead to any potential risk of pollutant release that cannot be avoided?			
P2.2.3	Has the proposed activity participant identified any risk to soil and land use, as well as surface and groundwaters due to land erosion caused by the proposed A6.4 activity?			
P2.2.4	Has the proposed activity participant identified any risk to the functions and services provided by the landscape by degradation of soil resources and loss of ecosystem services provided by soils?			
P2.2 <mark>.5</mark>	Does the proposed A6.4 activity that involves the production, harvesting and/or	☐ Yes ☐ Potentially ☐ No ☐ N/A		

P2 Land			Host country regulations	Generic risk assessment
	management of living natural resources by small-scale landholders and/or local communities pose any risk related to appropriate and culturally sensitive sustainable resource management practices? Is the activity located in an area where historical pollution such as land contamination exists?			
	Conclusion of the do-no-harm risk assessment on principle 2 (Air, land and water) – Land:			☐ Yes☐ Potentially☐ No☐ N/A

P2.3: Water

- 31. P2.3.1: The proposed activity shall promote the sustainable and efficient use of water resources to avoid adverse impacts on water resources and water-related ecosystems, including mountains, coasts, oceans, forests, wetlands, rivers, aquifers and lakes.
- 32. P2.3.2: The activity participant shall avoid the release of pollutant or, when avoidance is not feasible, minimize and/or control the intensity and mass flow of their release in accordance with host country regulations. This applies to the release of pollutants due to routine, non-routine and accidental circumstances with the potential for local, regional and transboundary impacts.²⁹
- 33. P2.3.3: When the proposed activity is a potentially significant consumer of water, in addition to applying the resource efficiency requirements of this principle, the activity participant shall adopt measures that avoid or reduce water usage so that the activity's water consumption does not have significant adverse impacts on people and biodiversity. These measures include, but are not limited to, the use of additional, technically feasible water conservation measures, the use of alternative water supplies, the reuse of water, water consumption offsets to reduce total demand for water resources to within the available supply, and evaluation of alternative activity locations, as appropriate.

²⁹ Transboundary pollutants include those covered under the Convention on Long-Range Transboundary Air Pollution.

- 34. P.2.3.4: The activity participant shall implement technically and financially feasible and cost-effective³⁰ measures for improving efficiency in its consumption of water, with a focus on core areas of the proposed activity(ies).
- 35. P.2.3.5: The activity shall ensure that water resources covering surface water and ground water are conserved.

Table 6. Guiding questions for the do-no-harm risk assessment on water

P2 Water			Host country regulations	Generic risk assessment
Principle level question	Does the proposed activity involve any activity that can result in adverse impacts on water resources and water related ecosystems, including mountains, coasts, oceans, forests, wetlands, rivers, aquifers and lakes?	☐ Yes☐ Potentially☐ No☐ No☐ N/A		
Principle level question	Does the proposed A6.4 activity involve water usage that can result in adverse impacts on water resources and water-related ecosystems, including mountains, coasts, oceans, forests, wetlands, rivers, aquifers and lakes? (If yes or potentially, please respond to the guiding questions)	☐ Yes ☐ Potentially ☐ No ☐ N/A		
	uiding question: entially above, please co	omplete the question	ons below.	
P2.3 <mark>.1</mark>	Does the proposed A6.4 activity have any risk that could	☐ Yes☐ Potentially☐ No		

Technical feasibility is based on whether the proposed measures and actions can be implemented with commercially available skills, equipment, and materials, taking into consideration prevailing local factors such as climate, geography, infrastructure, security, governance, capacity, and operational reliability. Financial feasibility is based on financial considerations, including relative magnitude of the incremental cost of adopting such measures and actions compared to the activity's investment, operating and maintenance costs.

P2 Water			Host country regulations	Generic risk assessment
	compromise the promotion of the sustainable and efficient use of water resources to avoid adverse impacts on water resources and water-related ecosystems, including mountains, coasts, oceans, forests, wetlands, rivers, aquifers and lakes?	□ N/A		
P2.3.2	Does the proposed A6.4 activity have a risk of releasing pollutants to air, water, and land in routine, non-routine or accidental circumstances?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P2.3 <mark>.2</mark>	Does the proposed A6.4 activity involve or lead to any potential risk of pollutant release that cannot be avoided?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P2.3 <mark>.3</mark>	Has the activity participant adopted measures that avoid or reduce water usage so that the activity's water consumption does not have significant adverse impacts on people and biodiversity?.	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Conclusion and water) -	of the do-no-harm risk a	assessment on pri	nciple 2 (Air, land	☐ Yes ☐ Potentially ☐ No ☐ N/A

5.2.3 Principle 3: Ecology and natural resources

36. Principle 3Activity participant shall considers the direct, indirect and cumulative 31 activity-related impacts on habitats and the biodiversity they support. It shall also considers threats to biodiversity, for example, habitat loss, degradation and fragmentation, invasive alien species, overexploitation, hydrological changes, nutrient-loading, pollution and incidental take, as well as projected climate changeimpacts.

Principle 3 (Ecology and natural resources) criteria:

P3.1 Natural resources

37. P3.1.1: The activity shall ensure a precautionary approach ³² to natural resource conservation, including soil, minerals and other depletable natural resources, and avoid negative environmental impacts.

P3.2 Biodiversity

- 38. P3.2.1: The activity shall ensure ecosystem functions are maintained to secure the benefits of ecosystem services.
- 39. P3.2.2: The activity shall protect, and conserve terrestrial, freshwater, coastal and marine biodiversity.
- 40. P3.2.3: The activity shall maintain or enhance biodiversity and ecosystem functionality in areas where improved forest management is undertaken.
- 41. P3.2.4: The activity shall not lead to the reduction/negative impact of any recognized endangered, vulnerable or critically endangered species.
- 42. P3.2.5: Habitats of endangered species shall be specifically identified and managed to protect or enhance them.
- 43. P 3.2.6: The activity shall not introduce any alien species (not currently established in the country or region of the project) into new environments. The project shall implement measures to avoid the potential for accidental or unintended introductions, including the transportation of substrates and vectors (such as soil, ballast and plant materials) that may harbour alien species.
- 44. P3.2.7: Where alien species are already established in the country or region of the proposed project, the activity developer shall exercise diligence in not spreading them into areas in which they have not already been established.

Cumulative impacts: Impacts that result from incremental changes caused by other part, present or reasonably foreseeable action together with the project

The objective of precautionary approach is prevention rather than remediation.

P3.3 Critical habitats³³

- 45. P3.3.1: An activity that potentially impacts habitats identified as critical habitats shall be implemented only when it meets the following three prerequisites:
 - (a) (1)—The risk of the activity negatively impacting the catchment and risks impacting activity success shall be assessed and addressed to ensure its ongoing, long-term viability and impact on surrounding High Conservation Value34 and ecological assets;
 - (b) (2)—There is no measurable adverse impacts on the criteria or biodiversity values for which the critical habitat was designated, and on the ecological processes supporting those biodiversity values; and
 - (c) (3)—A robust, appropriately designed, and long-term habitats and biodiversity action plan is in place to achieve net gains in those biodiversity values for which the critical habitat was designated.

Table 7. Guiding questions for the do-no-harm risk assessment on ecology and natural resources

Principle 3 Ecology and natural resources		Host country regulations	Generic risk assessment	
Principle level question	Will the proposed A6.4 activity result in direct, indirect and cumulative activity- related impacts on habitats and the biodiversity they support, including threats to biodiversity (e.g. habitat loss, degradation and fragmentation, invasive alien	☐ Yes ☐ Potentially ☐ No ☐ N/A		

As per the IADB, Ceritical habitats are areas with high biodiversity importance, covering: (i) habitats of significant importance to critically endangered, endangered, vulnerable or near-threatened species, listed as such in the International Union for Conservation of Nature (IUCN) Red List of Threatened Species; (ii) habitats of significant importance to endemic and/or restricted-range species; (iii) habitats supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems; (v) areas associated with key evolutionary processes; and/or (vi) legally protected areas or internationally recognized areas of high biodiversity value, which may include reserves that meet the criteria of the IUCN protected area management categories I through VI; World Heritage Sites; areas protected under the Ramsar Convention on Wetlands; core areas of world biosphere reserves; or areas in the United Nations List of National Parks and Protected Areas; sites listed in the World Database of Key Biodiversity Areas; or other sites meeting the criteria of the IUCN 2016 Global Standard for the Identification of Key Biodiversity Areas.

As per Gold Standard SAFEGUARDING PRINCIPLES & REQUIREMENTS, an biological, ecological, social, or cultural value of outstanding significance or critical importance. High Conservation Value areas are critical areas in a landscape which need to be appropriately managed in order to maintain or enhance High Conservation Values (HCVs). The HCV areas includes both forest and non-forest ecosystems. (please Refer to Common Guidance for the identification of – HIGH CONSERVATION VALUES for further guidance on the interpretation of the HCV definitions and their identification in practice, to achieve standardization in use of the HCV approach. Also refer to Common Guidance for the Management and Monitoring of – HIGH CONSERVATION VALUES guidance on management and monitoring of HCVs, to be used as a companion to the identification guidance.

Principle 3	Ecology and natural re	esources	Host country regulations	Generic risk assessment
	species), overexploitation, hydrological changes, nutrient- loading, pollution and incidental take, as well as projected climate change impacts?			
	(If yes or potentially, please respond to the additional guiding questions)			
	uiding question:	questions below		
P3.1 <mark>.1</mark>	HasDees the proposed A6.4 activity participant identified any risk during the precautionary approach to natural resource conservation, including to soil, minerals and other depletable natural resources, that can result in irreversible negative environmental impacts by the proposed activity? consider the direct, indirect and cumulative activity-related impacts on habitats and the biodiversity they support?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P3.2 <mark>.1</mark>	Does a proposed A6.4 activity introduce any risk of loss of ecosystem services provided by soil benefits?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P3.2	Does a proposed activity introduce any	<mark>☐ Yes</mark> ☐ Potentially		

Principle	rinciple 3 Ecology and natural resources		Host country regulations	Generic risk assessment
	alien species into new environments?	<mark>□ No</mark> <mark>□ N/A</mark>		
P3.2	Does a proposed activity lead to the reduction or negative impact of any recognized endangered, vulnerable or critically endangered species?	□ Yes □ Potentially □ No □ N/A		
P3.2 <mark>.2</mark>	Does a proposed A6.4 activity have a risk of unsustainable forest management, including timber harvesting?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P3.2 <mark>.2</mark>	Does a proposed A6.4 activity pose a risk of depleting biodiversity and ecosystem functionality in areas where improved forest management is undertaken?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P3.2 <mark>.3</mark>	Does thea proposed A6.4 activity have any risk of not meeting the requirements for environment- friendly, socially beneficial, and economically viable plantations using native species whenever possible?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P3.2.4	Does the proposed A6.4 activity pose any risk to the any recognized endangered, vulnerable or critically endangered species?	✓ Yes✓ Potentially✓ No✓ N/A		

Principle 3	Principle 3 Ecology and natural resources			Generic risk assessment
P3.2.4	Does the proposed A6.4 activity pose any risk to the identified habitats of endangered species?	 ☐ Yes☐ Potentially☐ No☐ N/A		
P3.2.5	Does a proposed A6.4 activity pose a risk of introducing any alien species into new environments?	✓ Yes✓ Potentially✓ No✓ N/A		
P3.2.6	Does the proposed A6.4 activity have a risk of spreading alien species, already established in the country or region of the proposed project, into areas in which they have not already been established?	☐ Yes☐ Potentially☐ No☐ N/A		
P3.3 <mark>.1</mark>	Does thea proposed A.6.4 activity have a risk of negatively impacting critical habitats?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
	If yes or potentially, the activity participant shall demonstrate how the activity meets the three prerequisites described in P3.3.1 above.			
Conclusion natural reso	of do-no-harm risk asse urces):	ssment on principi	le 3 (Ecology and	☐ Yes ☐ Potentially ☐ No ☐ N/A

5.3 Social safeguards principles/criteria

5.3.1 *Principle 4*: Human rights³⁵

46. This principle stipulates that Tthe activity participant developer shall respect international human rights regarding to sustainable development, poverty alleviation and ensuring fair distribution of development opportunities and benefits. Also, an activity is to be implemented with due respect for human rights by avoiding infringement on the human rights of others and addressing adverse human rights impacts that the activity may cause or to which it may contribute.

Principle 4 (Human rights) criteria:

47. P4.1: An activity is not to discriminate with regard to participation and inclusion and is also not to undermine the national or regional measures for the realization of the right to development.

Table 8. Guiding questions for the do-no-harm risk assessment on human rights

Principle 4	Human rights		Host country regulations	Generic risk assessment
Principle level question	HasDoes the activity participant identified any risk provide a statement to confirm that the activity during its implementation and operation does acouldet undermine national or regional measures for the realization of the right regarding sustainableto development, poverty alleviation and ensuring fair distribution of development opportunities and benefits? If yes or potentially, please respond to the additional guiding questions	☐ Yes ☐ Potentially ☐ No ☐ N/A		

³⁵ Gold Standard (2023) Safeguarding Principles & Requirements.

^{36——}Gold Standard (2023) Safeguarding Principles & Requirements.

Principle 4	4 Human rights		Host country regulations	Generic risk assessment
	guiding question: mplete the questions belo	w <mark>:-</mark>		
P4. <mark>12</mark>	Does the proposed A6.4 activity participant confirm that the activity does nothave any adversely impact on the enjoyment of the human-rights (civil, political, economic, social or cultural) of the affected population and particularly of marginalized groups?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P4. <mark>13</mark>	Does the proposed A6.4 activity participant confirm that the activity does nothave any risk of leading to inequitable or discriminatory impacts on affected populations, particularly people living in poverty, or marginalized or excluded individuals or groups, including persons with disabilities?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P4. <mark>14</mark>	Does the proposed A6.4 activity participant confirm that the activity does not-have any risk of causinge restrictions in the availability of, quality of and/or access to resources or basic services, in particular for marginalized individuals or	☐ Yes ☐ Potentially ☐ No ☐ N/A		

Principle	4 Human rights		Host country regulations	Generic risk assessment
	groups, including persons with disabilities?			
P4.5	Does the activity participant confirm that local communities or individuals have not raised human rights concerns regarding the activity (e.g. during the stakeholder engagement process, etc.)?	∐ Yes ∐ No		
P4.6	Does the proposed activity participant confirm that the activity has not caused forced eviction and/or partial physical or economic displacement of Indigenous Peoples and local communities?	<mark>□ Yes</mark> □ Potentially □ No		
Conclusion of do-no-harm risk assessment on principle 4 (Human rights):				☐ Yes ☐ Potentially ☐ No ☐ N/A

5.3.2 *Principle 5*: Labour³⁷

- 48. Principle 5 refers to the importance of Proposed activities shall promote employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. To promote social labour and working conditions, the following has to be considered:
 - (a) Promoting education programmes for local communities to access labour opportunities created by the proposed activity; ;
 - (b) Promoting the fair treatment, non-discrimination and equal opportunity of project workers;
 - (c) Protecting project workers, including vulnerable workers such as women, persons with disabilities and migrant workers, contracted workers, community workers, and primary supply workers, as appropriate;
 - (d) Preventing the use of all forms of forced labour and child labour;

³⁷⁻World Bank (n.a.) Environmental and Social Standards (ESS). ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. Available at: https://documents1.worldbank.org/curated/en/924371530217086973/ESF-Guidance-Note-6-Biodiversity-Conservation-English.pdf.

- (e) Supporting the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law;
- (f) Providing project workers with accessible means to raise workplace concerns.

Principle 5 (Labour) criteria:

- 49. P5.1: The proposed activity shall aimed to promote social labour and working conditions, the following has to be considered: pPromoting education programmes for local communities to access labour opportunities created by the proposed activity;
- 50. P5.2: The proposed activity shall promoteing the fair treatment, non-discrimination and equal opportunity of activity workers;
- 51. P5.3: The proposed activity shall pProtecting activity workers, including vulnerable workers such as women, persons with disabilities and migrant workers, contracted workers, community workers, and primary supply workers, as appropriate;
- 52. P5.4: The proposed activity shall pPreventing the use of all forms of forced labour³⁹ and child labour;
- 53. P5.5: The proposed activity shall sSupporting the principles of freedom of association and collective bargaining of activity workers in a manner consistent with national law;
- 54. P5.6: The proposed activity shall perovideing activity workers with accessible means to raise workplace concerns.

Table 9. Guiding questions for the do-no-harm risk assessment on labour

Principle 5 l	Labour		Host country regulations	Generic risk assessment
Principle level question	DoeHas the proposed A6.4 activity participant identified any risk in confirm that the proposed activity will-promotinge social labour and working conditions according to the host country regulatory requirements applicable to the proposed activity?	☐ Yes ☐ Potentially ☐ No ☐ N/A		

³⁸⁻World Bank (n.a.) Environmental and Social Standards (ESS). ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources. Available at: https://documents1.worldbank.org/curated/en/924371530217086973/ESF-Guidance-Note-6-Biodiversity-Conservation-English.pdf.

³⁹ Forced labour which consists of any work or service not voluntarily performed that is exacted from an individual under threat of force or penalty shall not be used in connection with the activity. Where cases of forced labour are identified, immediate steps shall be taken to correct and remedy them.

Principle 5 Labour			Host country regulations	Generic risk assessment
	If yes or potentially, please respond to the additional guiding questions			
Principle level question	Does the project design document describe how the proposed activity promotes social labour and working conditions as described in paras 53 and 54.2	<mark>□ Yes</mark> □ No		
	uiding question:			
_	etivity participant have		lemented measu	res to:
P5.1	Does the proposed A6.4 activity have any risk that could compromise the promotion of education programmes for local communities to access labour opportunities created by the proposed activity? a. Promote education programmes for	☐ Yes ☐ Potentially ☐ No ☐ N/A		
	programmes for local communities to access labour opportunities created by the proposed activity?			
P5. <mark>24</mark>	Does the proposed A6.4 activity have any risk that could compromise the promotion of the fair treatment, non-discrimination and equal opportunity of activity workers?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
	b. Promote the fair treatment, non-discrimination and			

Principle	Principle 5 Labour		Host country regulations	Generic risk assessment
	equal opportunity of activity workers?			
P5. <mark>34</mark>	Does the proposed A6.4 activity have any risk of Pprotecting activity workers, including vulnerable workers such as women, persons with disabilities and migrant workers, contracted workers, community workers, and primary supply workers, as appropriate?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P5. <mark>41</mark>	Does the proposed A6.4 activity have a risk d. Prevent the of usinge of allany forms of forced labour and child labour?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P5.1	Does the proposed A6.4 activity have any risk e. of sSupporting the principles of freedom of association and collective bargaining of activity workers in a manner consistent with national law?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P5.1	fDoes the proposed A6.4 activity have any risk of p-rovidinge activity workers with accessible means to raise workplace concerns.?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Conclusio	n of do-no-harm risk asse	ssment on principl	e 5 (Labour):	☐ Yes ☐ Potentially ☐ No

Principle 5 Labour	Host country regulations	Generic risk assessment
		□ N/A

5.3.3 *Principle 6*: Health and safety 40

Principle 6 refers to how activities, equipment and infrastructure can increase community exposure to risks and impacts. This principle involves The activity participant shall evaluateing the risks and impacts of the activity on the health and safety of the affected communities during the implementation and operation of the proposed activity life cycle, including those who, because of their circumstances, may be vulnerable. This principle refers to how proposed activities may cause community exposure to health and safety risks and impacts⁴⁴.

Principle 6 (Health and safety) criteria:

- 56. P6.1: The activity shall avoid community exposure to increased health risks (e.g. pollution, contaminated areas/resources) and disease and shall not adversely affect the health of the workers and the community.
- 57. P6.2: The activity shall put measures in place to protect workers from the inherent risk of the nature of their work/sector, including, but not limited to, physical, chemical, biological and radiological hazards, and specific threats to women.
- 58. P6.23: The activity shall undertake appropriate health and safety assessment while considering safety risks to communities; adopt appropriate avoidance, minimization, and mitigation measures following national legal requirements, good international practice⁴² and favouring the prevention or avoidance of risks and impacts over their minimization and reduction, and ensure accidents or incidents associated with the activity are appropriately recorded, reported and addressed, and that emergency preparedness and response plans are in place.
- 59. P6.34: The assessment and adopted management measures shall take into account differences in risk exposure and sensitivity of women and men a gender-sensitive approach, as well as marginalized and disadvantaged groups, including children, older persons, persons with disabilities, minorities, and Indigenous Peoples.

⁴⁰ IADB (2020). Environmental and Social Policy Framework. Environmental and Social Performance Standard 4: Community Health, Safety, and Security. Available at: https://blogs.iadb.org/sostenibilidad/en/espf-environmental-and-social-policy-framework-in-a-nutshell/.

⁴¹ IADB (2020). Environmental and Social Policy Framework. Environmental and Social Performance Standard 4: Community Health, Safety, and Security. Available at: https://blogs.iadb.org/sostenibilidad/en/espf-environmental-and-social-policy-framework-in-a-nutshell/.

⁴² For example, the International Finance Corporation Environmental, Health and Safety Guidelines, available at: http://www.ifc.org/ehsquidelines.

Table 10. Guiding questions for the do-no-harm risk assessment on health and safety

Principle 6	Health and safety		Host country regulations	Generic risk assessment
Principle level question	HasDoes the proposed A6.4 activity participant confirm that as part of the implementation of the proposed activity, it has considered the identified any activity risks to and impacts of the activity on the health and safety of the affected communities during the activity life cycle, including those who, because of their circumstances, may be vulnerable, as per host country regulatory requirements applicable to the proposed activity? If yes or potentially, please respond to the additional guiding questions	☐ Yes ☐ Potentially ☐ No ☐ N/A		
<mark>Principle</mark> level question	Does the activity participant confirm that the proposed activity does not involve potential risks to the health and safety of affected communities during its life cycle?	□ Yes □ No		
Principle level question	Does the activity participant confirm that the proposed activity does not involve any potential risks to the workers' safety and health?	<mark>⊟ Yes</mark> □ No		

Principle 6	6 Health and safety		Host country regulations	Generic risk assessment
Principle level question	Has the activity participant described in the [project design document] the measures on how the activity is addressing any identified risk related to community health and safety?	□ Yes □ No □ N/A		
	upublication	nes the proposed	activity involve	
P6.1	Has the proposed A6.4 activity participant considered the risks and impacts of the activity on the health and safety of the affected communities during the activity crediting period, including those who, because of their circumstances, may be vulnerable, as per host country regulatory requirements applicable to the proposed activity?			
P6.1	Has theproposed activity participant identified any risk related to the construction and/or infrastructure development (e.g. roads, buildings, dams) of the proposed activity?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P6.1	Has the proposed activity participant identified any risk related to aAir pollution, noise,	☐ Yes ☐ Potentially ☐ No ☐ N/A		

Principle	6 Health and safety		Host country regulations	Generic risk assessment
	vibration, traffic, injuries, physical hazards, poor surface water quality due to runoff, erosion, or sanitation exceeding the limits established by relevant host country regulation or industrial practices?			
P6.1	Has the proposed activity participant identified any risk related to hHarm or losses due to the failure of structural elements of the activity (e.g. collapse of buildings or infrastructure)?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P6.1	Has the proposed activity participant identified any risk related to Risks of water-borne or other vector-borne diseases (e.g. temporary breeding habitats), communicable and noncommunicable diseases, nutritional disorders, mental health including gender-based violence?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P6.1	Has the proposed activity participant identified any risk related to t∓ransport, storage, and use and/or disposal of hazardous or dangerous materials	☐ Yes ☐ Potentially ☐ No ☐ N/A		

Principle	6 Health and safety		Host country regulations	Generic risk assessment
	(e.g. explosives, fuel and other chemicals during construction and operation)?			
P6.1	Has the proposed activity participant identified any risk related to Aadverse impacts on ecosystems and ecosystem services relevant to communities' health (e.g. food, surface water purification, natural buffers from flooding)?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P6.2	Has the proposed activity participant identified any health and/or safety risks to communities that can result into accidents or incidents that require mitigation measures in accordance with national legal requirements, good international practice?			
P6.3	Has the proposed activity participant identified any health and/or safety risk exposure of women and eman, as well as of women and men, as well as marginalized and disadvantaged groups, including children, older persons, persons with disabilities, minorities, and Indigenous Peoples?			

Principle 6 Health and safety	Host	country	Generic	risk
	regula	tions	assessme	ent
Conclusion on do-no-harm risk assessment on princip safety):	ole 6 (H	lealth and	☐ Yes ☐ Potent ☐ No ☐ N/A	tially

5.3.4 Principle 7: Gender equality 43

60. This principle refers to Proposed activities—The activity participant shall identify potential gender-based risks and impacts and introducing effective measures to avoid, prevent or mitigate such risks and impacts, thereby eliminating the possibility of reinforcing pre-existing inequalities and/or creating new ones.

Principle 7 (Gender equality) criteria:

- 61. P7.1: The activity shall not The activity participant shall avoid reinforcinge gender-based discrimination and shall not lead/contribute to adverse impacts on gender equality and/or the situation of women and girls in all their diversity.
- 62. P7.2: The activity participant shall apply the principles of non-discrimination, equal treatment and equal pay for equal work.

Table 11. Guiding questions for the do-no-harm risk assessment on gender equality

F				
Principle 7	Gender equality		Host country regulations	Generic risk assessment
Principle level question	DoeHas the activity participant confirm that effective measures have been-identified described in the [project design document] to avoid, prevent or mitigate potential gender-based risks and impacts -eliminate the possibility ofthat reinforceing pre-existing inequalities and/or createing new ones? If yes or potentially, please respond to the additional guiding questions	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Principle level question	Have local stakeholders' groups/leaders raised gender equality concerns regarding the	<mark>⊒ Yes</mark> <mark>⊒ No</mark>		

⁴³⁻IADB (2020). Environmental and Social Policy Framework. Environmental and Social Performance Standard 9: Gender Equality. Available at: https://blogs.iadb.org/sostenibilidad/en/espf-environmental-and-social-policy-framework-in-a-nutshell/.

Principle	e 7 Gender equality		Host country regulations	Generic risk assessment
	activity during the local stakeholder?			
	al guiding question: a activity participant have docum	nented implem	ented measure	es to:
P7.1	Any gender equality concern(s) raised during the local stakeholder has/have been documented and addressed?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P7.1	Does the proposed A6.4 activity have any riskThe activity does not involve or lead to of adverse impacts on gender equality and/or the situation of women and girls.	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P7.1	Does the proposed A6.4 activity have any riskThe activity does not involve or lead to the of exacerbatingen of risks of gender-based violence (for example, through the influx of workers to a community, changes in community and household power dynamics, increased exposure to unsafe public places and/or transport, etc.)?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P7.2	Does the proposed A6.4 activity have The activity does not pose a risk to the principle of non-discrimination, equal treatment, equal pay for equal work? (e.g. risk of equal payment for women and men for the implementation work of the activity; fair conditions for women and men to participate in the implementation of the activity considering pregnancy/maternity/paternity leave/marital status; inform	☐ Yes ☐ Potentially ☐ No ☐ N/A		

Principle	7 Gender equality		Host country regulations	Generic risk assessment
	community (women and men) about the implementation of the activity in an accessible manner to ensure full engagement, including access to leadership positions).			
P7.2	Does the proposed A6.4 activity have any riskThe activity does not of preventing men and women from having equal opportunities to participate in identified tasks and activities, whether through paid work, volunteer work, or community contributions, as appropriate?	☐ Yes☐ Potentially☐ No☐ N/A		
P7.2	Does the proposed A6.4 activity have any riskThe activity does not of limiting the participation of women or men based on pregnancy, maternity/paternity leave, or marital status?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P7.2	Does the proposed A6.4 activity have any risk of The activity does not involve or lead to reproducing discriminations against personwomen based on gender, in particular participation in the design and implementation or access to opportunities and benefits.	☐ Yes☐ Potentially☐ No☐ N/A		
P7.2	Does tThe proposed A6.4 activity does not have a risk ofinvolve or lead to limitatingens on women's ability to use, develop and protect natural resources, considering the different roles and positions of women and men in accessing environmental goods and services? (for example, activities that could lead to	☐ Yes ☐ Potentially ☐ No ☐ N/A		

Principle 7	Gender equality		Host country regulations	Generic risk assessment
	natural resources degradation or depletion in communities who depend on these resources for their livelihoods and well-being).			
Conclusion equality):	of do-no-harm risk assessn	nent on princip	ole 7 (Gender	☐ Yes ☐ Potentially ☐ No ☐ N/A

5.3.5 *Principle 8:* Land acquisition and involuntary resettlement⁴⁴, ⁴⁵

63. Principle 8 refers to the fact that activity-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Activity-related land acquisition and restrictions on land use can have adverse impacts on communities and persons. Activity-related land acquisition or restrictions on land use may cause physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets, or access to assets, leading to loss of income sources or other means of livelihood), or both. Involuntary resettlement should be avoided. The activity participant shall make efforts to avoid involuntary resettlement. Where involuntary resettlement is unavoidable; it will be minimized, and appropriate measures to mitigate adverse impacts on displaced persons (and on host communities receiving displaced persons) will be carefully consulted, planned and implemented.

Principle 8 (Land acquisition and involuntary resettlement) criteria:

- 64. P8.1: The activity participant shall either not involve er-nor support involuntary forced relocation and/or displacement of people.
- P8.2: When physical displacement (i.e., relocation or loss of shelter) cannot be avoided, tThe activity shall mitigate displacement impacts and risks of the displaced persons and host communities to at least restore livelihoods and/or living standards to pre-project levels.
- 66. P8.3: The activity participant shall mitigate impacts and risks of economic displacement (loss of land, assets, or access to assets, leading to loss of income sources or other means of livelihood), when economic displacement cannot be avoided.
- 67. P8.43: The activity participant shall conduct a census and a socioeconomic baseline survey to identify all affected individual, group or community who will be physically or economically displaced. A resettlement action plan and/or livelihood action plan shall

⁴⁴ Involuntary recent refers to a scenario is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or restrictions on land use that result in displacement.

⁴⁵⁻World Bank (n.a.). Environmental and Social Standards (ESS). ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement. Available at: https://documents1.worldbank.org/curated/en/294331530217033360/ESF-Guidance-Note-5-Land-Acquisition-Restrictions-on-Land-Use-and-Involuntary-Resettlement-English.pdf.

be integrated into the A6.4 Environmental and Social Management Plan Form activity decumentation—where physical displacement is involved. The action plans will be developed in accordance with international best practice (e.g. <u>United Nations Development Programme Standard 5: Displacement and Resettlement</u>). and in full consultation and agreement—with the affected individual, group or community. Resettlement understandings reached by the activity participant and with affected individual, group or community should be reflected in written agreements.

P8.4: Expert stakeholders' opinions and recommendations shall be sought and demonstrated as being included in the activity design where physical displacement is involved.

Table 12. Guiding questions for the do-no-harm risk assessment on land acquisition and involuntary resettlement

Principle 8 resettlemen	Land acquisition a	nd involuntary	Host country regulations	Generic ris
Principle level question	Does the proposed A6.4 activity involve or support involuntary land acquisition or restrictions on land use that may cause physical displacement economic displacement or both? If yes or potentially, please respond the additional guiding questions relocation and/or displacement of people? If the answer to question above is "yes", please explain the reason and how the activity will ensure compliance with applicable requirements.	☐ Yes ☐ Potentially ☐ No ☐ N/A		
	ıiding question: <mark>oposed activity involv</mark>	ve or lead to:		

Principle 8 resettleme	8 Land acquisition a	nd involuntary	Host country regulations	Generic risk assessment
P8. <mark>12</mark>	Does the proposed A6.4 activity have risks Risk of forced evictions or involuntary relocation of people?	☐ Yes☐ Potentially☐ No☐ N/A		
P 8. <mark>23</mark>	Has the proposed activity participant identified any risks to displaced persons and host communities when physical displacement (i.e. relocation or loss of shelter) cannot be avoided Physical displacement (i.e. relocation or loss of shelter) of people?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
	(If applicable), Has the proposed A6.4 activity developed a resettlement action plan and/or livelihood action plan in consultation and agreement with affected individuals, groups or communities, as per host country regulations?			
P 8.3	Does the proposed A6.4 activity have any risk of restoring livelihoods and/or living standards, to at least pre-project levels for displaced persons?	☐ Yes☐ Potentially☐ No☐ N/A		

Principle resettleme	8 Land acquisition a ent	nd involuntary	Host country regulations	
P 8.4	If answer to the quest	ion above is "YES	or "POTENTIALI	<u>-Y":</u>
	(i) Has the proposed A6.4 activity developed a resettlement action plan and/or livelihood action plan in consultation and agreement with affected individuals, groups or communities?	<mark>□ Yes</mark> □ Ne □ N/A		
	(ii) Has the activity integrated the resettlement action plan and/or livelihood action plan into the activity?	□ Yes □ No □ N/A		
P-8.5	Has the activity sought out—and—included opinions—and recommendations from—an—expert stakeholder—in—the activity design?	<mark>□ Yes</mark> <mark>□ No □ N/A</mark>		
	Conclusion of do-no-harm risk assessment on principle 8 (Land acquisition and involuntary resettlement):			

5.3.6 Principle 9: Indigenous Peoples

68. This principle refersThe activity participant shall—to respect for and taking into account the rights of Indigenous Peoples and individuals as contained in applicable legal obligations and commitments, which include pertinent national legislation, applicable international law, or in Indigenous legal systems. The activity participant shall recognize the Indigenous legal systems which are those that are recognized under national laws. In the absence of such laws, Indigenous systems will be recognized if they are not inconsistent with applicable national legislation and international laws. The activity can also create opportunities for Indigenous Peoples to participate in and benefit from activity-related activities that may help them achieve their aspirations for economic and social development. Furthermore, activity participant should take into account that Indigenous Peoples may play a role in sustainable development by often

promoting, owning and managing activities and enterprise+s as partners in development.⁴⁶

Principle 9 (Indigenous Peoples) criteria:

- 69. P9.1: Activity participants shall identify all communities of Indigenous Peoples within the activity area of influence who may be affected by the activity.
- 70. P9.2: As part of the design process, Tthe activity participant shall carry out an environmental and social analysis of the activities that may affect or involve Indigenous Peoples by completing the A6.4 Environmental and Social Safeguards Risk Assessment Form. The activity participant analysis shall verify whether Indigenous Peoples reside in the proposed activity areas and/or if the activities may affect Indigenous Peoples outside of activity areas. The assessment shall include the potential impacts on their rights, lands, territories, gender relations and resources.
- 71. P9.3: The activity shall not result in the forcible removal of Indigenous Peoples from their lands and territories.
- 72. P9.4: The activity participant shall recognize and respect the Indigenous Peoples' collective rights to own, use, and develop and control the lands, resources and territories that they have traditionally owned, occupied or otherwise used or acquired, including lands and territories for which they do not yet possess title.
- 73. P9.5: The activity participant shall respect, protect and conserve and shall not take the cultural, intellectual, religious and/or spiritual property of Indigenous Peoples without their free, prior and informed consent (FPIC).⁴⁷ FPIC must be obtained when there are impacts on (i) the territory; (iii) cultural heritage; or (iv) places containing sacred elements of special value for the community. FIPIC t-must be documented both within the process as well as in the agreements reached in the dialogue and consultations and ultimately through good faith negotiation with the community.
- 74. P9.6: The activity participant shall ensure that Indigenous Peoples are provided with the equitable sharing of benefits to be derived from utilization and/or commercial development of natural resources on lands and territories or the use of their traditional knowledge and practices by the activity. This shall be done through good faith negotiation in a manner that is culturally appropriate and inclusive and that does not impede land rights or equal access to basic services, including health services, clean water, energy, education, safe and decent working conditions, and housing.

⁴⁶ IADB (2020). Environmental and Social Policy Framework. Environmental and Social Performance Standard 7: Indigenous Peoples. Available at: https://blogs.iadb.org/sostenibilidad/en/espf-environmental-and-social-policy-framework-in-a-nutshell/.

⁴⁷ FPIC is a specific right granted to Indigenous Peoples recognized in the United Nations Declaration on the Rights of Indigenous Peoples, which aligns with their universal right to self-determination. FPIC allows Indigenous Peoples to provide or withhold/withdraw consent, at any point, regarding activity impacting their territories. FPIC allows Indigenous Peoples to engage in negotiations to shape the design, implementation, monitoring, and evaluation of the activity. See https://www.fao.org/indigenous-peoples/our-pillars/fpic/en/.

P9.7: As part of stakeholder consultation, the activity participants shall make available mutually agreed, culturally appropriate, accessible and inclusive channels for feedback and grievance redress to Indigenous Peoples and their representatives. Such process shall be established as part of the process for continuous engagement of local stakeholders in accordance with the "Article 6.4 activity standard for projects" or the "Article 6.4 activity standard for programmes of activities" at the beginning of the implementation of the activity with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned and remain operational throughout the activity cycle. A conflict resolution mechanism should be also discussed, agreed upon and developed during the early stages of the programme or activity cycle. Furthermore, the activity participants shall inform Indigenous Peoples of the availability of the appeal and grievance processes under the Article 6.4 mechanism.

Table 13. Guiding questions for the do-no-harm risk assessment on Indigenous Peoples

P 9 Indige	P 9 Indigenous Peoples		Host country regulations	Generic risk assessment
Principle level question	Does the proposed A6.4 activity involve Indigenous Peoples within the activity area of influence who may be affected directly or indirectly by the activity? If yes or potentially, please respond to the additional guiding questions	☐ Yes ☐ Potentially ☐ No ☐ N/A		
	 guiding question: -i <mark>nformation: Does the</mark>	proposed activit	y involve::	
P9.1	Does the proposed A6.4 activity pose risks in Aareas where Indigenous Peoples are present (including activity area of influence)?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P9.2	Does the proposed A6.4 activity have risk to aAreas, land and territory claimed by Indigenous Peoples?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P9.2	Does the proposed A6.4 activity pose risks Impacts (positive or negative) to to the human rights, lands, natural	☐ Yes ☐ Potentially ☐ No ☐ N/A		

P 9 Indig	P 9 Indigenous Peoples		Host country regulations	Generic risk assessment
	resources, territories, and traditional livelihoods of Indigenous Peoples?			
P9.2	Does the proposed A6.4 activity pose risks tolf answer to the questions above is "YES" or "POTENTIALLY", -Is it determined that the proposed activity may affect the rights, lands, resources, or territories of Indigenous Peoples? - (if applicable) Has an Indigenous Peoples Plan or Indigenous Peoples Plan Framework been elaborated and included in the activity documentation? - (if applicable) Was the plan developed in accordance with the effective and meaningful	☐ Yes ☐ No ☐ Potentially ☐ N/A		
	participation of Indigenous Peoples and in accordance with United Nations Development Programme Guidelines? - (if applicable), Did the activity obtain free, prior and informed consent from the Indigenous Peoples before			

P 9 Indigenous Peoples		Host country regulations	Generic risk assessment	
	intellectual, religious, and/or spiritual property?			
P9.3	Does the proposed A6.4 activity have a risk of Risk of forcibly removing Indigenous Peoples from their lands and territories?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P9.4	Does the proposed A6.4 activity have any risks with regard to recognizing and respecting the Indigenous Peoples' collective rights to own, use, and develop and control the lands, resources and territories that they have traditionally owned, occupied or otherwise used or acquired, including lands and territories for which they do not yet possess title?	☐ Yes☐ Potentially☐ No☐ N/A		
P9.6	Does the proposed A6.4 activity pose risks of uUtilization and/or commercial development of natural resources on lands and territories claimed by Indigenous Peoples? (Consider and, where appropriate, ensure consistency with the answers under principle 8)—eriterion 8.4.)	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P9.6	If answer to the above questions is	☐ Yes		

P 9 Indigenous Peoples		Host country regulations	Generic risk assessment
"YES" or "POTENTIALLY": - Did the activity obtain free, prior and informed consent from the Indigenous Peoples before taking their cultural, intellectual, religious, and/or spiritual property?	☐ No ☐ Potentially ☐ N/A		
Does the proposed A6.4 activity have risks of Does the activity ensure that the Indigenous Peoples receivinge an equitable sharing of benefits resulting from the use of their traditional knowledge and practices?			
- Does the proposed A6.4 activity have risks of Does the activity—ensuringe that the sharing of benefits resulting from a good-faith negotiated agreement regarding the appropriate the use of Indigenous Peoples' traditional knowledge and practices is culturally appropriate and inclusive?			
- Does the proposed A6.4 activity have risks of Does the activity ensuringe			

P 9 Indigen	ous Peoples		Host country regulations	Generic risk assessment
	that the agreement provisions regardingef equitable sharing of benefits does not impede land rights or equal access to basic services, including health services, clean water, energy, education, safe and decent working conditions, and housing?			
P.9.7	Does the activity lack appropriate feedback and grievance channels for Indigenous Peoples and their representatives? (see para 66.)	☐ Yes ☐ No ☐ Potentially ☐ N/A		
	Has a communication channel mechanism been established at the beginning of the activity implementation with due consideration given to customary dispute settlement mechanisms among the Indigenous Peoples concerned, and will it remain operational throughout the activity cycle?	<mark>□ Yes</mark> □ Ne □ N/A		
	Are opinions and recommendations of an expert stakeholder(s) sought and demonstrated as being included in the activity design?	<mark>□ Yes</mark> □ No □ N/A		
	If the answer to the question above is "YES", has the activity design been changed, modified and/or updated?	<mark>□ Yes</mark> □ Ne □ N/A		

P 9 Indigenous Peoples	Host country regulations	Generic risk assessment
Conclusion of do-no-harm risk assessment on princi Peoples):	iple 9 (Indigenous	☐ Yes☐ Potentially☐ No☐ N/A

5.3.7 Principle 10: Corruption 48

75. Activity participants and any involved stakeholders shall avoid, prevent, detect, and respond to corruption while designing, developing, implementing and operating the proposed activity. Corruption has negative impacts on every aspect of society by undermines national security and the rule of law, stunts development and equitable economic growth, exacerbates the impacts of climate change, and other shocks, and saps governments of legitimacy, eroding faith in democracy itself. It divertings resources that are needed to lift people out of poverty, improve health outcomes, and ensure that children have access to a quality education. Activity participants and any involved stakeholders shall detect and respond to corruption while designing, commissioning and operating the proposed activity.

Principle 10 (Corruption) criteria:

76. P 10.1: The activity participant shall not involve, be complicit in or inadvertently contribute to or reinforce corruption or corrupt practices. Activity participants shall prevent, detect and respond to corruption during all the activity cycle.

Table 14. Guiding questions for the do-no-harm risk assessment on corruption

P 10 Corru	P 10 Corruption			Generic risk assessment
Principle level question	Has notDees the activity participant provided a statement/confirmation that:	☐ Yes ☐ No		
	i) The proposed activity does not involve, or is not complicit in, contributing to or reinforcing corruption or corrupt activities?			
	ii) The activity participant ensured that the proposed			

⁴⁸-Gold Standard (2023). Safeguarding Principles & Requirements.

⁴⁹ United States Agency for International Development (n.d.) Anti-corruption. Available at: https://www.usaid.gov/anti-corruption.

P 10 Cor	ruption		Host country regulations	Generic risk assessment
	activity does not have a risk of encouraging bribery, kickbacks or other unethical behavior? (If yes, please respond additional guiding questions)			
Addition	al guiding questions:			
P.10.1	Does the proposed A6.4 activity in its design, development, implementation, and operation have a risk of contributing to or reinforcing corruption or corrupt activities?	☐ Yes☐ Potentially☐ No		
P.10.1	Does the proposed A6.4 activity, in its design development, implementation and operation have a risk of encouraging bribery, kickbacks or other unethical behavior?	☐ Yes☐ Potentially☐ No		
Conclusi (Corrupti	ion of the do-no-harm ris	sk assessment (on principle 10	☐ Yes ☐ Potentially ☐ No ☐ N/A

5.3.8 *Principle 11*: Cultural heritage⁵⁰

77. Cultural heritage provides continuity in tangible and intangible forms between the past, present and future. People identify with cultural heritage as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. Activity participants shall avoid impacts on cultural heritage. When avoidance of impacts is not possible, it will identify and

⁵⁰ Cultural heritage provides continuity in tangible and intangible forms between the past, present and future. People identify with cultural heritage as a reflection and expression of their constantly evolving values, beliefs, knowledge and traditions. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice.

implement measures to address impacts on cultural heritage by completing A6.4 Environmental and Social Safeguards Risk Assessment Form and the A6.4 Environmental and Social Management Plan Formdeveloping a cultural heritage management plan. 51

Principle 11 (Cultural heritage) criteria:

- 78. P11.1: The activity shall not involve or be complicit in the alteration, damage or removal of any sites, objects or structures of critical cultural heritage.
- 79. P11.2: Critical cultural heritage consists of one or both of the following types of cultural heritage: (i) the internationally recognized heritage of communities who use, or have used within living memory, the cultural heritage for long-standing cultural purposes; or (ii) legally protected cultural heritage areas.
- 80. P11.23: The activity participant is responsible for designing an activity to avoid significant adverse impacts to cultural heritage. The environmental and social risk impact assessment should determine whether the proposed location of an activity is in areas where cultural heritage is expected to be found during construction or operations. The activity participant will not proceed with the activity until an assessment by competent professionals and/or an entity on cultural heritage, recognized by the host government, is made to ensure that no adverse impacts to cultural heritage will occur.
- 81. P11.3—4: Where an activity proposes to utilize cultural heritage, including the knowledge, innovations, or practices of local communities, affected communities shall be informed of their rights under applicable law, ⁵² the scope and nature of the proposed commercial development, and the potential consequences of such development.

Table 15. Guiding questions for the do-no-harm risk assessment on cultural heritage

P 11 Cultural heritage		Host country regulations	Compliance justification	
Principle level question	Does the proposed A6.4 activity involve altering, damaging or removing sites, objects, or structures of significant cultural heritage? (If yes or potentially, please respond to additional guiding	☐ Yes ☐ Potentially ☐ No ☐ N/A		

World Bank (n.a.). Environmental and Social Standards (ESS). ESS8 Cultural Heritage. Available at: https://thedocs.worldbank.org/en/doc/736221511809522500-0290022017/original/EnvironmentalSocialStandardESS8FactSheetWBESF.pdf.

⁵² Cultural heritage is preserved, protected and promoted in mitigation activities in a manner consistent with the United Nations Educational, Scientific and Cultural Organization (UNESCO) Cultural Heritage conventions or any other national or international legal instruments that might have a bearing on the use of cultural heritage.

P 11 Cultural h	eritage		Host country regulations	Compliance justification
	questions P11.1 & P11.2)			
Principle level question	A6.4 activity involve usage or partial usage of sites, objects or structures of significant cultural heritage? (If yes or potentially, please respond to additional guiding questions related to P11.3)	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Additional guid If yes above, d	ding question: loes the proposed activ	vity involve:		
P11. <mark>12</mark>	Activities adjacent to or within a critical cultural heritage site? Does the A6.4 activity have a risk of alteration, damage or removal of any sites, objects or structures of critical cultural heritage?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P11. <mark>23</mark>	Does the proposed A6.4 activity have a risk of segignificant excavations, demolitions, movement of earth, flooding or other environmental changes?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P11. <mark>23</mark>	Does the proposed A6.4 activity have a risk of Aalterations to landscapes and natural features with cultural significance?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P11. <mark>23</mark>	Does the proposed A6.4 activity have a risk of Aadverse impacts to sites, structures, or objects with historical, cultural, artistic, traditional or religious values or intangible forms of culture (e.g. knowledge,	☐ Yes ☐ Potentially ☐ No ☐ N/A		

P 11 Cultural	heritage		Host country regulations	Compliance justification
	innovations, practices)? Note: Activities intended to protect and conserve cultural heritage may also have inadvertent adverse impacts.			
P11. <mark>43</mark>	Does the proposed A6.4 activity have a risk of utilization of tangible and/or intangible forms (e.g. practices, traditional knowledge) of cultural heritage for commercial or other purposes? If the answer to the question above is "YES" or "POTENTIALLY", are the communities made aware of their rights under the law, the scope and nature of the proposed development, and its potential consequences?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P11.4	If the answer to the question above is "YES" or "POTENTIALLY", are the communities made aware of their rights under the law, the scope and nature of the proposed development, and its potential consequences?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
P11. <mark>43</mark>	Does the proposed A6.4 activity have a risk of Does the activity—providinge equitable sharing of benefits from the commercialization of such knowledge, innovations, or practices in a way that is consistent with	☐ Yes ☐ Potentially ☐ No ☐ N/A		

P 11 Cultui	ral heritage		Host country regulations	Compliance justification		
	their customs and traditions?					
P11.4	Are the opinions and recommendations of a competent professional(s) sought and demonstrated as being included in the activity design?	□ Yes □ Potentially □ No <mark>□ N/A</mark>				
P11. <mark>43</mark>	If the answer to the above question is "YES", Does the activity participant has not changed, modified and updated the activity design been changed, modified and updated considering the opinions and recommendations of competent professionals recognized by the host country government?	☐ Yes ☐ Potentially ☐ No ☐ N/A				
P11. <mark>34</mark>	Does the proposed A6.4 activity involve any risks related to the involuntary relocation of people? If yes, please complete the resettlement section under principle 5.	☐ Yes ☐ Potentially ☐ No ☐ N/A				
P11. <mark>34</mark>	Does the proposed A6.4 activity involve any risks related to identifying and managing legitimate tenure rights that may be affected by the activity? If yes, please complete the land acquisition section under principle 5.	☐ Yes <mark>☐ Potentially</mark> ☐ No <mark>☐ N/A</mark>				
Conclusion heritage):	n of the do-no-harm risk as	sessment on prir	nciple 11 (Cultural	☐ Yes ☐ Potentially		

P 11 Cultural heritage	Host country regulations	Compliance justification
		□ No □ N/A

6 Demonstrating impact to sustainable development

82. Activity participants shall demonstrate the direct impact⁵³ of their Article 6.4 activities and/or Article 6.4 PoAs to the sustainable development of the host country(ies) through reference to the host country(ies) by demonstrating how the proposed activity supports host countries to achieve their own sustainable development priorities/objectives referred in the section 6.1 and SDGs in the section 6.2 by completing the A6.4 Sustainable Development Tool Form.

6.1 Consideration of sustainable development priorities/objectives of host party

- 83. Activity participants shall identify the host country's sustainable development priorities/objectives that may include national strategies for sustainable development and/or SDG achievement, SDG national targets and indicators, and economic, social and environmental indicators related to the proposed activity type.
- 84. If the host country defines national sustainable development objectives, national strategies for sustainable development and/or SDG achievement, SDG national targets and indicators relevant to a proposed activity, activity participants are required teshall include them in the A6.4 Sustainable Development Fform.

6.2 Identification of positive [and negative] impacts to 17 Sustainable Development Goals

- 85. Activity participants shall identify SDGs relevant to the proposed activity type:
 - (a) Activity participants are required to assess the activity against each of screen the 17 SDGs to identify those SDGs that the proposed project activity has positive [and/or negative] impacts on and provide justification of any excluded SDGs:
 - (b) Activity participants shall assess how the proposed activity may result in a direct and significant impact to the relevant SDGs and are required to follow the steps provided in section 6.3.

6.3 Identification of impact to sustainable development

- 86. Activity participants shall identify and list the likely, direct and significant impact to sustainable development resulting from the proposed activity, keeping in mind the local and national context.
- 87. Impact to sustainable development shall:

Direct impact: an impact which is based on direct contribution/interaction by an activity with an environmental, social or economic component during the crediting period.

- (a) Be universally applicable to the activity type (environmental, economic and social contribution);
- (b) Result in a direct and significant primary impact (i.e. the activity is the main driver of change);
- (c) Be significant by recurring/lasting during at least the whole crediting period of a proposed activity and impacting the primary stakeholders and/or local environment in a direct and measurable way. Significance is a subjective term and should therefore be assessed at the activity level based on the magnitude of impact as measured by an indicator and subsequently monitored and validated and verified by a DOE.
- 88. [Based on the assessment of both positive and negative impacts to 17 SDGs of a proposed activity, an activity participant is required to conduct a qualitative assessment to identify possible synergies and trade-offs with 17 SDGs in order to conclude overall impacts to the SDGs. In order to help an activity participant to identify possible synergies and trade-offs with 17 SDGs, the table below from the Intergovernmental Panel on Climate Change (IPCC) provides synergies and trade-off of sectoral and system mitigation options with 17 SDGs.]

[Table 16. Trade-offs and synergies between sectoral mitigation options and SDGs⁵⁴]

	Relation with Sustainable Development Goals																		
	Sectoral and system mitigat	ion options	1		3		5	6		8		_	11		14	15	16	17	Chapter source
Г	Wind energy		+	•	+			+	+	+	+		+						Sections 6.4.2, 6.7.7
25	Solar energy		+	=	+				+	+	+		+	=	_	-			Sections 6.4.2, 6.7.7
tem	Bioenergy									_	+		+	+	•	ē			Sections 6.4.2, 12.5, Box 6.1
sys	Hydropower				+			+	+					Ť	-	ī			Section 6.4.2
rgy	Geothermal energy		+	_	ī				+		+		+						Section 6.4.2
Energy systems	Nuclear power				ē					+	+					÷			Section 6.4.2, Figure 6.18
_ [Carbon capture and storage (C	CS)			+			-	_		+			٠					Section 6.4.2, 6.7.7
-	Carbon sequestration in agricul	ture ¹	+	+	٠			+		+				•	Ŧ	+	+		Sections 7.3, 7.4, 7.6
Agriculture, forestry and other land use (AFOLU)	Reduce CH ₄ and N ₂ O emission i		_		+			Ξ.		_	ю.			+	+	Ŧ	_		Section 7.4
45 F	Reduced conversion of forests	3			+			+			_				#	Ŧ		100	Section 7.4
ores	Ecosystem restoration, reforest	,	+		+							m.	+		+	#		_	Section 7.4
e, To	Improved sustainable forest ma		+		+			+		+	+	Ξ.			+	+			Section 7.4
<u>a</u> <u>I</u>	Reduce food loss and food was	-	+	=	+			+	-					+	-	Ť	+		Section 7.5
her la	Shift to balanced, sustainable h			170	+			+	+					+		+			Section 7.4
Ag ot	Renewables supply ³	icardity dicts								+	+			•	ä				Section 7.6
_	_ nenewables supply																		Section 7.0
10	Urban land use and spatial plan	nning	+	٠	+	+	+	+	+	+	+	٠	+	٠	٠	٠	+		Sections 8.2, 8.4, 8.6
Urban systems	Electrification of the urban ene	rgy system	+	•	+	+	+	+	+	+	+	+	+	•	+	•	+		Sections 8.2, 8.4, 8.6
syst	District heating and cooling ne	tworks	+	_	+				+	+	+		+	+		+	+		Sections 8.2, 8.4, 8.6
an :	Urban green and blue infrastru	cture	+	+	+	+		+	+	+	+	٠	+	+	+	+	+		Sections 8.2, 8.4, 8.6
ا ا	Waste prevention, minimisation	n and management	+	+	•			+		٠	+		+	٠	+	+	+		Sections 8.2, 8.4, 8.6
L	Integrating sectors, strategies a	nd innovations	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	Sections 8.2, 8.4, 8.6
Г	Demand-side management		+	+	+			+	+	٠	٠	+	+	+					Section 9.8, Table 9.5
	Highly energy efficient building	envelope	٠	+	•	+		+	+	٠	٠	٠	+	+			+	+	Section 9.8, Table 9.5
6	Efficient heating, ventilation an	d air conditioning (HVAC)	٠	+	+			+	+	٠	٠	٠	+	+					Section 9.8, Table 9.5
Buildings	Efficient appliances		٠	+	+	+	+	+	+	٠	-	٠	+	٠		+			Section 9.8, Table 9.5
텵	Building design and performan	ce	+	+	+			+	+	٠	-	+	+	+		+	+		Section 9.8, Table 9.5
ā	On-site and nearby production	and use of renewables	•	٠	+	+	+	•	•	•	•	٠	+	+		+	+	+	Section 9.8, Table 9.5
	Change in construction method	ls and circular economy			+			٠	+	•	+		+	+				+	Sections 9.4, 9.5
L	Change in construction materia	lls			٠			٠	+	٠	+		+	+		-		+	Section 9.4
	Fuel efficiency – light-duty vehi	cle	+		+				+	+			+			+			Sections 10.3, 10.4, 10.8
	Electric light-duty vehicles				٠				•	+	+	٠	+	٠					Sections 10.3, 10.4, 10.8
	Shift to public transport		+		+	+	+		+	+	٠	+	+	+					Sections 10.2, 10.8, Table 10.3
보	Shift to bikes, e-bikes and non	notorised transport	+		•	+	+		+	+	+	+	+	+		+			Sections 10.2, 10.8, Table 10.3
Iransport	Fuel efficiency - heavy-duty ve	hicle	+		+				+	+						+			Sections 10.3, 10.4, 10.8
Irar	Fuel shift (including electricity)	 heavy-duty vehicle 	_		+				+		+			÷		_			Sections 10.3, 10.4, 10.8
.	Shipping efficiency, logistics op				_						+								Sections 10.6, 10.8
	Aviation – energy efficiency, ne										+								Sections 10.5, 10.8
L	Biofuels				٠				+		+		+		•	٠			Sections 10.3, 10.4, 10.5, 10.6, 10.8
	Energy officions:												_		_				
	Energy efficiency	Iroduction			+				+	_	+								Section 11.5.3
stry	Material efficiency and demand Circular material flows	reduction									#								Section 11.5.3
Industry	Electrification												7	+	+			+	Section 11.5.3
_		ilication (CCII)	+	٠			+	_	#	*						Ξ			Sections 11.5.3, 6.7.7
L	CCS and carbon capture and ut	ilisation (CCO)			٠			-	٠	+	+		+			-			Section 11.5.3
	relations:	Related Sustainable Devel	opme	ent (oal		• 45					11							¹ Soil carbon management in cropland and grasslands,
Syne Trad		1 No poverty							luced							:4:-			agroforestry, biochar
	le-offs n synergies and trade-offs ⁴ represent no assessment ⁵	2 Zero hunger3 Good health and well4 Quality education	oeing	I			1 2	Res	taina pons nate	sible	cor							on	² Deforestation, loss and degradation of peatlands and coastal wetlands
	•	5 Gender equality							belo			er							³ Timber, biomass, agri. feedstock
6 Cloan water and capit			ation						on I										⁴ Lower of the two confidence
100	High confidence 7 Affordable and clean of			2.000 T Affordable and clean energy 116 Peace justice and strong institutions							levels has been reported								
	lium confidence	7 Affordable and clean e	energ	ly			16	rea	ce, jı	istic	e ar	nd st	ron	g in	stitu	tion	15		⁵ Not assessed due

6.3.1 Developing activity-level SD indicators

- 89. Activity participants shall take the following steps to establish activity-level sustainable development indicators for each identified direct and significant —impact to SDGs resulting from the proposed activity:
 - (a) **Step 1**: Activity participants are required to elaborate relevant activity-level indicators for the SDGs identified as impacted, taking into consideration the SDG, SDG targets and SDG indicators. At least oneAll relevant SDG target and corresponding indicator(s) for each SDG should be chosen (see Table 16 below):
 - (b) **Step 2:** The proposed activity-level sustainable development indicator(s) can be qualitative or quantitative and shall be monitorable over the crediting period. The proposed activity-level sustainable development indicator(s) shall:
 - (c) Be in line with the objectives and intent of the SDGs and their corresponding targets;⁵⁵
 - (d) Be primarily/directly impacted by the activity;
 - (e) Not be a (not be one-off/only once); and
 - (f) Include the monitoring approach and parameters, including frequency of monitoring, to be used for each selected activity-level SDG target indicator defined in the A6.4 Sustainable Development Form.

Table 17. Example of defining activity-level sustainable development indicator

Sustainable Development Goal (SDG)	SDG target	SDG indicator	Activity-level sustainable development indicator
Goal 13. Climate action (for renewable energy activity)	13.2 Integrate climate change measures into national policies, strategies and planning	13.2.1 Number of countries with nationally determined contributions, long-term strategies, national adaptation plans and adaptation communications, as reported to the secretariat of the United Nations	Amount of GHG emissions avoided or sequestered per year in tCO ₂ e

Source: Figure 17.1 in New, M., D. Reckien, D. Viner, C. Adler, S.-M. Cheong, C. Conde, A. Constable, E. Coughlan de Perez, A. Lammel, R. Mechler, B. Orlove, and W. Solecki, 2022: Decision-Making Options for Managing Risk. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [H.-O. Pörtner, D.C. Roberts, M. Tignor, E.S. Poloczanska, K. Mintenbeck, A. Alegría, M. Craig, S. Langsdorf, S. Löschke, V. Möller, A. Okem, B. Rama (eds.)]. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 2539–2654. doi:10.1017/9781009325844.026.

⁵⁵ United Nations-level SDGs, targets and indicators: https://unstats.un.org/sdgs/indicators/indicators-list/.

Sustainable Development Goal (SDG)	SDG target	SDG indicator	Activity-level sustainable development indicator
		Framework Convention on Climate Change 13.2.2 Total greenhouse gas (GHG) emissions per year	
Goal 5. Achieve gender equality and empower all women and girls (for high efficiency biomass-fired cookstove activity)	5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	5.4.1 Proportion of time spent on unpaid domestic and care work by sex, age and location	Average time saving associated with cooking time and fuel collection
Goal 1. End poverty in all its forms everywhere (for renewable energy activity or low greenhouse gas emitting safe drinking water production system implementation activity)	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	1.4.1 Proportion of population living in households with access to basic services	Proportion of population living in households with access to basic services ⁵⁶ (drinking water & modern energy)
Goal 6. Clean Water and sanitation	6.1 By 2030, achieve universal and equitable access to	6.1.1 Proportion of population using safely managed	Total number of populations served

https://sdg-indikatoren.de/en/1-4-1/ provides basic services defined in 1.4.1.

Sustainable Development Goal (SDG)	SDG target	SDG indicator	Activity-level sustainable development indicator
(for low greenhouse gas emitting safe drinking water production system implementation activity)	safe and affordable drinking water for all	drinking water services	with satisfactory level of safe water
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all (for the renewable energy activity)	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	7.1.1 Proportion of population with access to electricity	Total number of populations served with access to electricity
SDG8. Decent work and economic growth (for the methane recovery activity from the animal manure management activity)	8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities status	Number of full-time jobs created for males and females by the project Percentage of employees with salaries equivalent to the average wage of a country

90. Once activity participants complete the A6.4 Sustainable Development Fform, the outcome (including the form) must be shared during the local stakeholder consultation and with the DOE performing validation as per the Article 6.4 mechanism activity cycle procedures and the Article 6.4 mechanism activity standards.

6.4 Monitoring description/requirement of activity-level SD indicators

- 91. The activity participant shall describe in the A6.4 Sustainable Development Fform the monitoring procedures of the sustainable development indicators, including:
 - (a) Description of activity level SD indicators including selected SDGs, SDG targets and SDG indicators:
 - (b) Data unit and source of data;
 - (c) Information on monitoring/measurement procedures/methods;
 - (d) Monitoring frequency (at least annual).
- 92. Once activity participants complete the A6.4 Sustainable Development form, the outcome (including the form) must be shared with the DOE performing validation.

7 Validation

- 93. The DOE shall validate the appropriateness, relevance and sufficiency of information provided in the A6.4 Environmental and Social Seafeguards Reisk Aassessment Fform that includes identification of environmental and/or social risks caused by a proposed activity and the A6.4 Environmental and Social Management Plan that addresses environmental and/or social risks identified in the A6.4 Environmental and Social Seafeguards Reisk Aassessment Fform and contains the do-no-harm risk assessment, risk mitigation plan and environmental and social indicator by reviewing stakeholder consultation documents[inputs/comments] and conducting an interview with local stakeholders and employing professional judgement in order to:
 - (a) Evaluate quantitative as well as qualitative information to judge the adequacy of fulfilment of identification of environmental and/or social risks caused by a proposed activity, the do-no-harm risk assessment, risk mitigation plan and environmental and social indicators due to the activity considering host country regulations and/or relevant standards, best practices and obligations regulatory requirements—applicable to the proposed activity.
 - (b) Validate that the outcome of the A6.4 Environmental and Social Ssafeguards Rrisk Aassessment Fform and A6.4 Environmental and Social Management Plan are shared during the local stakeholder consultation and reflect inputs received from the local stakeholder consultation to the form and plan.
 - (c) Validate that established continuous engagement of local stakeholders is in accordance with the "Article 6.4 activity standard for projects" or the "Article 6.4 activity standard for programmes of activities"
- 94. The DOE shall validate the appropriateness, relevance and sufficiency of information provided in A6.4 Sustainable Development Fform by reviewing relevant host party documentation on sustainable development objective/criteria/goal, stakeholder consultation documents [inputs/comments] and conducting an interview with local stakeholders, and employing professional judgement in order to validate that:
 - (a) Sustainable development objective/indicators of host party, in the A6.4 Sustainable Development Form, are in line with host country's definition (when available)
 - (b) Activity-level SD indicators defined in the A6.4 Sustainable Development Fform are universally applicable to the activity type and significant by recurring/lasting during at least the whole crediting period of a proposed activity and impacting the primary stakeholders and/or local environment in a direct and measurable way and result in a primary benefit.
 - (c) Description of activity-level SD indicators is accurately reflected in the A6.4 Sustainable Development Fform.
- 95. The DOE shall provide confirmation that based on the A6.4 Environmental and Social Management Plan and the A6.4 Sustainable Development Fform, on whether the proposed activity results in no harm and contributes to sustainable development. If the DOE identifies that there is the presence of unavoidable negative impacts that exceed the environmental and social safeguards and may not be remediated by consultation or mitigation, the DOE shall issue a negative validation opinion as per A6.4 validation and verification standard or submit a deviation request submitted to the Supervisory

Body prior to submitting a request for registration. Box 1 below contains a best practice example of validation.

Box 1. Best practice example of validation

A proposed activity is to distribute energy efficient appliances to households in coastal and peninsular areas. An activity participant identifies that its activity contributes to SDG 14⁵⁷ and SDG 15⁵⁸ based on the location of the proposed activity that is near to the marine and forest ecosystem. During the validation, the DOE raises a corrective action request (CAR) to request the activity participant to clarify how a proposed activity's impact on SDG 14 and SDG 15 is direct and primary as per the section 6.3 of the applied tool. The activity participant acknowledges that its activity does not directly contribute to SDG 14 and SDG 15 and excludes its contribution to SDG 14 and SDG 15 from the A6.4 Sustainable Development Form. Based on this revision, the DOE close its CAR accordingly.

8 Verification

During the verification of emission reductions for any given monitoring period, the DOE 96. shall also verify the monitoring of the environmental and social indicators in the A6.4 Environmental and Social Management Plan and activity-level SD indicators in the A6.4 Sustainable Development Fform established as part of the registered activity and evaluate the outcome of the monitoring of all indicators defined in those plans. If the DOE observes any deviation from the information in the A6.4 Environmental and Social Management Plan and the A6.4 Sustainable Development Fform that are validated at the registration, it needs to provide its verification opinion on the observed deviation on whether the activity is still within the social and environmental safeguards and/or sustainable development impact defined in the A6.4 Environmental and Social Safeguards Risk Assessment Form, the A6.4 Environmental and Social Management Plan and A6.4 Sustainable Development Tool form or not. The DOE shall review any inputs comments received via continuous engagement of local stakeholders in accordance with the "Article 6.4 activity standard for projects" or the "Article 6.4 activity standard for programmes of activities and conduct an interview with local stakeholders and employ professional judgement in the evaluation of the ex-post fulfilment of do-noharm and sustainable development impacts due to the activity considering host country regulatory requirements applicable to the proposed activity.

The DOE shall confirm that the activity participant has measured, monitored and reported parameters established in the A6.4 Environmental and Social Management Plan and A6.4 Development Fform submitted at the registration stage. If the DOE identifies that there are unavoidable negative impacts that exceed parameters established in the A6.4 Environmental and Social Management Plan and A6.4 Sustainable Development Form and may not be remediated by consultation or mitigation, the DOE shall issue a negative verification opinion as per A6.4 validation and verification standard or submit a deviation request submitted to the Supervisory

⁵⁷ SDG 14 (life below water) is to conserve and sustainably use the oceans, seas and marine resources for sustainable development (https://sdgs.un.org/goals/goal14)

SDG 15 (life on land) is protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss (https://sdgs.un.org/goals/goal15).

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Body prior to submitting a request for issuance. Box 2 below contains a best practice example of verification. [example received from DOEs]

Box 2. Best practice example of verification

An activity participant identifies its contribution to SDG 8⁵⁹ based on jobs generated from the proposed activity and include the number of generated jobs in the A6.4 Sustainable Development Form as a monitoring indicator. During the verification of the monitoring of the number of jobs generated under SDG 8, a DOE identifies that the number includes the short-term construction phase jobs and raises a CAR to request the activity participant to clarify how the inclusion of short-term construction phase jobs is in line with section 6.3 of the applied tool which requires sustainable development impact to be significant by recurring/lasting during at least the whole crediting period of an activity. The activity participant acknowledges that the inclusion of short-term construction phase jobs is not in line with the sustainable development impact defined in section 6.3 of the applied tool and the DOE closes a CAR by verifying a revised number which does not include the number of short-term construction phase jobs.

⁵⁹ SDG 8 (Decent work and economic growth) is to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all (https://sdgs.un.org/goals/goal8).

Appendix 1. Draft principles, criteria, and guiding questions for environmental and social safeguards for REDD+ based on REDD+ Cancún Safeguards principles

1. Purpose

1. The purpose of this work is to provide separate modules/guiding questions for REDD+ projects/agriculture, forestry and other land use (AFOLU)/Cancun Safeguards in accordance with the paragraph 19 (f) of the report of the seventh meeting of the Supervisory Body¹

2. Environmental and social safeguards for REDD+

- 2. The implementation of REDD+ activities can generate positive and/or negative environmental and social impacts, in particular for the Indigenous Peoples and/or local communities living in forest areas and/or surrounding areas. In order to avoid, minimize and/or mitigate the potential negative impacts, Article 5.2 safeguards have been created under different contexts to be used during the development and implementation of REDD+ activities (both at jurisdictional (national and/or subnational) and project level). Examples of REDD+ initiatives/programmes that have established safeguards provisions include:²
 - (a) UNFCCC Warsaw Framework for REDD+.3
 - (b) Green Climate Fund's REDD+ Result-based Payments Pilot Program.⁴
 - (c) Architecture for REDD+ Transactions (ART)/The REDD+ Environmental Excellence Standard (TREES).⁵
 - (d) Climate, Community & Biodiversity (CCB) Standards.⁶
- 3. The following sections present and explain the safeguards requirements created under selected initiatives/programmes where REDD+ activities are being implemented in recent years; and that are considered the most relevant for the development of a module under the sustainable development tool for Article 6.4 of the Paris Agreement for REDD+ project activities.

¹ Available at: https://unfccc.int/sites/default/files/resource/a64-sb007 0.pdf.

² For a comparison of the different REDD+ standards consult: International REDD+ Standards and Financing: Eligibility Requirements (2022). Available at: https://internationalreddstandards.org

³ More information is available at: https://redd.unfccc.int/fact-sheets/warsaw-framework-for-redd.html

⁴ More information is available at: https://www.greenclimate.fund/redd

⁵ More information is available at: https://www.artredd.org/

⁶ More information is available at: https://www.climate-standards.org/ccb-standards/

2.1. REDD+ Cancun Safeguards

- 4. **Decision 1/CP.16,** ⁷ established seven safeguards that should be promoted and supported by countries when undertaking REDD+ activities (at national and/or subnational level) in the context of policy approaches and positive incentives. They are known as the **REDD+ Cancun Safeguards**:
 - (a) That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements;
 - (b) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty;
 - (c) Respect for the knowledge and rights of Indigenous Peoples and members of local communities by taking into account relevant international obligations and national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples;
 - (d) The full and effective participation of relevant stakeholders, in particular Indigenous Peoples and local communities;
 - (e) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions ... are not used for the conversion of natural forests, but are instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits:
 - (f) Actions to address the risks of reversals; and
 - (g) Actions to reduce displacement of emissions.
- 5. Also, as part of decision 1/CP.16,8 countries are requested to have in place a **system for providing information on how REDD+ Cancun Safeguards are being addressed and respected**. According to **decision 12/CP.17,**9 this system should, taking into account national circumstances and respective capabilities, recognize national sovereignty and legislation and relevant international obligations and agreements, and respecting gender considerations:
 - (a) Be consistent with the guidance identified in decision 1/CP.16, appendix I, paragraph 1;
 - (b) Provide transparent and consistent information that is accessible by all relevant stakeholders and updated on a regular basis;
 - (c) Be transparent and flexible to allow for improvements over time;

Decision 1/CP.16, appendix I, paragraph 2. Available at: https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf - page=26

⁸ Decision 1/CP.16, paragraph 71 (d)

Decision 12/CP.17, paragraph 2. Available at: https://unfccc.int/resource/docs/2011/cop17/eng/09a02.pdf#page=16

- (d) Provide information on how all of the REDD+ Cancun Safeguards are being addressed and respected;
- (e) Be country-driven and implemented at the national level; and
- (f) Build upon existing systems, as appropriate.
- 6. Also, according to decision 12/CP.17, ¹⁰ countries should provide a **summary of information** on how all REDD+ Cancun safeguards are being addressed and respected throughout the implementation of REDD+ activities. **Decision 17/CP.21,** ¹¹ has given further guidance to ensure transparency, consistency, comprehensiveness and effectiveness when providing information on how all REDD+ Cancun Safeguards are being addressed and respected. In particular, it has encouraged countries to include the following elements, where appropriate:
 - (a) Information on national circumstances relevant to addressing and respecting the safeguards;
 - (b) A description of each safeguard in accordance with national circumstances;
 - (c) A description of existing systems and processes relevant to addressing and respecting safeguards, including the information systems, in accordance with national circumstances;
 - (d) Information on how each of the safeguards has been addressed and respected, in accordance with national circumstances.
- 7. According to **decision 12/CP.19,** 12 countries should start providing a summary of information in their national communications or communication channels, including via the web platform of the UNFCCC, after the start of the implementation of REDD+ activities. The frequency of subsequent presentations of the summary of information should be consistent with the provisions for submissions of national communications from Parties not included in Annex I to the Convention and, on a voluntary basis, via the **web platform on the UNFCCC website**. To date, 29 countries have provided a summary of information regarding the Cancun REDD+ Safeguards (see Table 1), divided as follow:
 - (a) 1st summary of information: 19 countries
 - (b) 2nd summary of information: 8 countries
 - (c) 3rd summary of information: 1 country
 - (d) 5th summary of information: 1 country.
- 8. It should be noted that the main purpose of the summary of information submitted by a country is to explain how the REDD+ Cancun Safeguards are being addressed and respected at the national and/or subnational level (and not at the project level).

¹⁰ Decision 12/CP.17, paragraph 3

Decision 17/CP.21, paragraph 5. Available at: https://unfccc.int/resource/docs/2015/cop21/eng/10a03.pdf#page=13

Decision 12/CP.19, paragraphs 4 and 5. Available at: https://unfccc.int/resource/docs/2013/cop19/eng/10a01.pdf#page=33

Table 1. Latest summary of information regarding REDD+ Cancun Safeguards submitted by country

Country	Year of submission	Link
Argentina	2019	1st Safeguards information summary
Belize	2021	2nd Safeguards information summary
Brazil	2018	2nd Safeguards information summary
Cambodia	2019	2nd Safeguards information summary
Chile	2023	2nd Safeguards information summary - Spanish
Colombia	2020	5th Safeguards information summary
Costa Rica	2022	2nd Safeguards information summary
Côte d'Ivoire	2019	1st Safeguards information summary
Democratic Republic of the Congo	2022	1st Safeguards information summary
Ecuador	2022	3rd Safeguards information summary
Fiji	2021	1st Safeguards information summary
Gabon	2020	1st Safeguards information summary
Ghana	2019	1st Safeguards information summary
Guyana	2023	2nd Safeguards information summary
Honduras	2020	1st Safeguards information summary
India	2022	1st Safeguards information summary
Indonesia	2023	2nd Safeguards information summary
Lao People's Democratic Republic	2021	1st Safeguards information summary
Liberia	2022	1st Safeguards information summary
Malaysia	2019	1st Safeguards information summary

Country	Year of submission	Link
Mexico	2017	1st Safeguards information summary
Myanmar	2019	1st Safeguards information summary
Panama	2023	2nd Safeguards information summary - Spanish
Papua New Guinea	2020	1st Safeguards information summary
Paraguay	2019	1st Safeguards information summary - Spanish
Peru	2019	1st Safeguards information summary - Spanish
Suriname	2020	1st Safeguards information summary
Uganda	2020	1st Safeguards information summary
Viet Nam	2018	1st Safeguards information summary

Source: <u>UNFCCC REDD+ Web Platform</u> (visited on 12 January, 2024).

3. GCF Results-Based Payments Programme

9. The **Green Climate Fund (GCF)** has implemented in 2017–2022 a REDD+ Results-Based Payments Programme, consistent with the Warsaw Framework for REDD+ and other REDD+ decisions under the UNFCCC. Proposals for the GCF REDD+ Programme are assessed through the use of a **scorecard**, ¹³ which presents eligibility criteria that the proponent must pass. The final amount to be paid by the GCF per country will be determined based on a combination of factors, including the scorecard results and available finance, and is subject to Board approval.

10. During this pilot phase, countries had to demonstrate compliance with eligibility criteria, including criteria related to the REDD+ Cancun Safeguards (see Figure 1 and Figure 2).

Available in Annex III of Terms of reference for the pilot programme for REDD+ results-based payments: https://www.greenclimate.fund/sites/default/files/document/terms-reference-pilot-programme-redd-results-based-payments.pdf

Figure 1. GCF first stage scorecard (based on the concept note)

Section 1: Eligibility criteria	Evaluation	Indicative guidance
In relation to UNFCCC decisions		
(i) Has a link to the National REDD-plus strategy or Action Plan been provided to the UNFCCC REDD-plus platform or is otherwise publicly available?	Pass/Fail	If yes, provide link
(ii) Has information on the NFMS ²⁰ been provided [to the UNFCCC Web platform in case BUR annex is not yet submitted or within the Technical Annex to the BUR?	Pass/Fail	If yes, provide link Noting Decision 1/CP.16, paragraph 71(c), footnote 7.
(iii) Has the FREL/FRL applicable to the results periods under consideration been submitted and its Technical Assessment (TA) finalized?	Pass/Fail	If yes, provide links to the FREL/FRL and the TA report.
(iv) Is a system in place for providing information on how all of the safeguards referred to in Appendix I of 1/CP.16 are addressed and respected?	Pass/Fail	If yes, provide evidence of the system
(v) Has a summary of information been provided to the UNFCCC Information Hub or in the National Communication on how all of the safeguards were addressed and respected during the results period under consideration?	Pass/Fail	If yes, provide link
(vi) Have REDD-plus results, within the eligible period for the RfP, been reported in a Technical Annex to the BUR?	Pass/Fail	If yes, provide link to the BUR (should appear on UNFCCC website)
(vii) Has the Technical Analysis been completed or an expected date of completion been provided?	Pass/Fail	If yes, provide link of the report or provide evidence of when the Technical Analysis wil be concluded
Eligible scale		
(viii) Is the scale of results at a national or, on an interim basis, an eligible subnational level?	Pass/Fail	If yes, see section 3.7 for definition of eligibl subnational level
Other		
(ix) Does the Concept Note include a written consent from the National REDD-plus Focal Point or Entity?	Pass/Fail	If yes, provide supporting evidence (e.g. letter from REDD-plus focal point or entity)

Source: GCF terms of reference for the pilot programme for REDD+ results-based payments (2017).

Figure 2. GCF second stage scorecard (based on the funding proposal) - safeguards section

Section 3: Non-carbon elements*	Evaluation	Indicative guidance			
Section 3a: Safeguards in 1/CP.16, Appendix I (i.e. the "Cancun Safeguards")					
The following is based on the "Summary of information on how the safeguards in 1/CP.16 are being addressed and respected throughout the implementation of activities" (Decision 12/CP.17).					
Does the "summary of information on safeguards" provide information on how each of the safeguards below were addressed and respected in a way that ensures transparency, consistency, comprehensiveness and effectiveness:					

 (i) That actions complement or are consistent with the objectives of national forest programmes and relevant international conventions and agreements. 	Pass/Fail	Fail = the summary is missing information to understand how the safeguard has been
(ii) Transparent and effective national forest governance structures, taking into account national legislation and sovereignty.	Pass/Fail	addressed and respected. Pass = the summary provides information
(iii) Respect for the knowledge and rights of indigenous peoples and members of local communities, by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples.	Pass/Fail	on how the safeguard was addressed and respected taking into account decision 17/CP.21
(iv) The full and effective participation of relevant stakeholders, in particular indigenous peoples and local communities, in the actions referred to in paragraphs 70 and 72 of this decision.	Pass/Fail	
(v) That actions are consistent with the conservation of natural forests and biological diversity, ensuring that the actions referred to in paragraph 70 of this decision are not used for the conversion of natural forests, but are instead used to incentivize the 12 protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits.	Pass/Fail	
(vi) Actions to address the risks of reversals.	Pass/Fail	
(vii) Actions to reduce displacement of emissions.	Pass/Fail	

Source: GCF terms of reference for the pilot programme for REDD+ results-based payments (2017)

- 11. In addition, activities should demonstrate compliance with the following GCF policies:
 - (a) Interim Policy on Prohibited Practices;¹⁴
 - (b) Gender Policy;¹⁵
 - (c) Indigenous People's Policy;16 and
 - (d) Environmental and Social Policy¹⁷.
- 12. Up to date, GCF has approved results-based payments for Costa Rica (2014 and 2015); Argentina (2014–2016); Colombia (2015 and 2016); Indonesia (2014–2016); Paraguay (2015–2017); Chile (2014–2026); Ecuador (2014) and Brazil (2014–2015). RBPs for other results are in the pipeline and may be brought to the GCF Board for approval in the future.
- 13. The GCF initiated consultations in 2020 regarding the continuation of the REDD+ RBPs Programme, and based on the outcomes of such consultations, have elaborated a "Proposal on the financing of results-based payments for REDD+"18 that is valid until 2027. In the proposal, the criteria related to safeguards have not changed. However, "an additional 3.5 per cent will be included in the final payment if the use of proceeds is designed to deliver non-carbon benefits beyond the Cancun Safeguards". In the last meeting of the GCF Board (held between 23–25 October 2023), the Board took note of the proposal, but no decision was taken under this agenda item.

Available at: https://www.greenclimate.fund/sites/default/files/document/policy-prohibited-practices.pdf

¹⁵ Available at: https://www.greenclimate.fund/sites/default/files/document/gcf-gender-policy.pdf

¹⁶ Available at: https://www.greenclimate.fund/sites/default/files/document/ip-policy.pdf

Available at: https://www.greenclimate.fund/sites/default/files/document/revised-environmental-and-social-policy.pdf

Available at: https://www.greenclimate.fund/sites/default/files/document/18-proposal-financing-results-based-payments-redd-gcf-b37-14.pdf

4. Architecture for REDD+ Transactions / The REDD+ Environmental Excellence Standard (ART/TREES)¹⁹

- 14. The Architecture for REDD+ Transactions (ART) has been developed with the aim to achieve environmental integrity in REDD+ emission reductions and removals (ERRs) at national and jurisdictional scale. ART has been developed to be consistent with UNFCCC COP decisions, including the Paris Agreement, Warsaw Framework for REDD+, and the REDD+ Cancun Safeguards.
- 15. The REDD+ Environmental Excellence Standard (TREES) sets out ART requirements for the "quantification, monitoring, and reporting of GHG emissions and removals; demonstration of implementation of the Cancun Safeguards; and verification, registration, and issuance of TREES credits. TREES has been designed to ensure that all TREES credits issued are real, measured, permanent, additional, net of leakage, verified by an accredited independent third party, and are not double counted." Up to date 20 jurisdictions (national and subnational) have demonstrated interest in setting up REDD+ programmes under ART/TREES, with different levels of progress (see table 2).
- 16. In regard to **environmental, social and governance safeguards**, ART/TREES "requires Participants to demonstrate they have implemented REDD+ actions defined in the REDD+ implementation plan in consistency with Cancun Safeguards ensuring activities do no harm". It is the goal of the Standard to "provide concrete guidance on how a Participant can demonstrate that it has addressed and respected all the Cancun Safeguards, while drawing on the step-wise nature of REDD+ implementation."²¹

"TREES aims to ensure Participants are in full conformances with the Cancun Safeguards. TREES "unpacks" the safeguards into **themes** and **indicators** (see Box 1) in line with relevant international agreements and decisions to provide a stepwise path for Participants to demonstrate progressive and ongoing safeguard performance, while fostering transparent and consistent reporting, and allowing for third-party verification of Participant conformance."²²

"Aiming to respect the autonomy of Participants to develop and implement procedures, policies, or programmes appropriate to their unique circumstances when demonstrating conformance with environmental, social and governance safeguards under TREES, the Standard requires conformance with safeguards requirements under the UNFCCC but does not prescribe specific approaches that must be used. As a result, TREES Safeguards have been developed to assess conformance in government-led programmatic REDD+ implementation. While specific requirements for traditional project-level safeguards such as formal grievance processes or benefit-sharing plans are not prescribed, the themes and indicators seek to ensure that

¹⁹ Information on this section have been extracted and adapted from The REDD+ Environmental Excellence Standard (TREES) - Version 2.0. Available at: https://www.artredd.org/trees/

²⁰ ART/TREES Section 1.1

²¹ ART/TREES Section 12.1

²² ART/TREES Section 12.4

activities are implemented in conformance with all Cancun Safeguards, including transparent implementation of activities and allocation of resources."²³

Box 3. ART/TREES themes and indicators for REDD+ Cancun Safeguards

Themes: each safeguard is "broken down into thematic topics which are encompassed in Cancun Safeguards, and which define the conditions that must be met in order to address and respect the Cancun Safeguards in alignment with national policies, laws and regulations". As certain Cancun Safeguards encompass human rights obligations, the "wording of associated themes is aligned with international human rights laws, which requires countries to "respect," to "protect," and to "fulfill" these obligations".

Indicators: each indicator is meant to "provide the stepwise process by which Participants can demonstrate conformance with all Cancun Safeguards while relying on progressive reporting on how the safeguards have been addressed and respected throughout REDD+ implementation. Verification will occur against the indicators only; as such, applicability, temporality, and scope conditions are included as appropriate". There are three types of indicators:

Structure: demonstrate the relevant governance arrangements (e.g. policies, laws, and institutional arrangements) that are in place in the country and applicable jurisdiction for the case of subnational Participants under TREES and guarantee the implementation of REDD+ actions is done in consistency with Cancun Safeguards;

Process: demonstrate that relevant institutional mandates, as well as processes, procedures, and/or mechanisms, are in place and enforced in the country for the implementation of REDD+ actions in consistency with the Cancun Safeguards; and

Outcome: demonstrate implementation outcomes against the themes under which Cancun Safeguards have been unpacked, in consistency with the respect of rights and fulfilment of duties in accordance with international and national legislation and applicable jurisdictional legislation for the case of subnational Participants under TREES.

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²³ Ibid.

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Table 2. REDD+ programmes under ART/TREES

Programme ID	Sovereign programme developer	Programme name	Status	Programme jurisdiction(s)	Programme country
ART105	Secretaria de Estado de Meio Ambiente do Amapa	Amapa	Listed	Amapa	BRAZIL
ART108	Ministerio de Ambiente y Desarrollo Sostenible	Amazon Region	Listed	Amazonas, Caquet∙, GuainÌa, Guaviare, Putumayo, Va	COLOMBIA
ART121	Permanent Secretariat for REDD+	Burkina Faso REDD+ Program	Listed	08 Administrative Regions	BURKINA FASO
ART101	Fondo Nacional de Financiamento Forestal (FONAFIFO)	Costa Rica	Listed	NA NA	COSTA RICA
ART112	Ministry of Environment and Sustainable Development	DRC Province of Tshuapa	Listed	Tshuapa	Democratic Republic of the CONGO
ART109	Ministry of Environment, Water and Ecological Transition of Ecuador	Ecuador	Listed	NA	ECUADOR
ART116	Ethiopian Forestry Development	Ethiopia	Listed	NA	ETHIOPIA
ART114	Conseil National Climat (CNC ñ National Climate Council)	Gabon	Listed	NA	GABON
ART106	Forestry Commission of Ghana	Ghana	Listed	10 southwestern regions	GHANA
ART102	Guyana Forestry Commission	Guyana	Regist ered	NA	GUYANA

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Programme ID	Sovereign programme developer	Programme name	Status	Programme jurisdiction(s)	Programme country
ART119	Ministry of Environment and Territorial Development of Jalisco State	Jalisco REDD+ Program	Listed	JALISCO	MEXICO
ART104	Secretaria de Estado de Meio Ambiente e Recursos Naturais (SEMA) do Maranhão	Maranhao	Listed	Maranhao	BRAZIL
ART120	MT State Environment Secretariat (SEMA/MT)	Mato Grosso REDD+ Program	Listed	Mato Grosso	BRAZIL
ART113	REDD Implementation Centre	Nepal	Listed	Bagmati, Gandaki and Lumbini	NEPAL
ART110	Climate Change and Development Authority	Papua New Guinea	Listed	NA	PAPUA NEW GUINEA
ART111	Ministry of the Environment (MINAM)	Peru	Listed	NA	PERU
ART115	Secretary of Ecology and Environment	Quintana Roo	Listed	QUINTANA ROO	MEXICO
ART103	Secretary of Environment and Water Resources (SEMARH)	Tocantins	Listed	Tocantins	BRAZIL
ART118	Ministry of Water and Environment	Uganda	Listed	National	UGANDA
ART107	Viet Nam Administration of Forestry, Ministry of Agriculture and Rural Development	Viet Nam	Listed	11 subnationals	VIET NAM

Source: ART/TREES Registry (visited 14 January 2024)

17. The following figure presents the themes and indicators for REDD+ Cancun Safeguard A. The complete list of themes and indicators for all REDD+ Cancun Safeguards are available in the ART/TREES Standard document.

Figure 3. Themes and indicators for Cancun Safeguard A

12.5.1 Cancún Safeguard A

Actions are complementary or consistent with the objectives of national forest programs and relevant international conventions and agreements

THEME 1.1 Consistency with the objectives of national forest programs

Structural Indicator: Domestic legal framework or policy (or national REDD+ strategy or action plan) for REDD+ actions is clearly defined and designed in consistency with national and if applicable, subnational, forest policies/programs.

Process Indicator: Public institutions have made use of mandates, procedures and resources to ensure REDD+ actions are designed and implemented in consistency with the broader legal or policy framework of the forest sector, and inconsistencies are identified and resolved.

Outcome Indicator: Design and implementation of REDD+ actions have been consistent with or complemented the objectives of the national and if applicable, subnational, forest policies/programs.

THEME 1.2 Consistency with the objectives of relevant international conventions and agreements

Structural Indicator: Domestic and if applicable, subnational, legal framework or policy (or national REDD+ strategy or action plan) for REDD+ actions recognize and promote the application of ratified relevant international conventions and agreements in the context of design and implementation of REDD+ actions.

Process Indicator: Public institutions have made use of mandates, procedures, and resources to design and implement REDD+ actions that recognize and promote the application of ratified relevant international conventions and agreements.

Outcome Indicator: Design and implementation of REDD+ actions have been consistent with or has complemented the objectives of identified, ratified and relevant international conventions and agreements.

Source: ART/TREES (2021)

18. Participants must always "report on conformance with all Cancun Safeguards and, in accordance to the step-wise nature of REDD+ implementation, will report in a progressive manner through indicators established for each theme. At the start of the first crediting period, Participants must demonstrate conformance with Cancun Safeguards by reporting against all structure and process indicators. In addition, at the beginning of the first crediting period, Participants must either demonstrate conformance with the outcome indicators or present a plan for achieving conformance with the outcome indicators by the end of five years from the time the Participant joined ART. Within five years of joining ART, Participants must demonstrate conformance

with all structure, process and outcome indicators under all themes under each of the Cancun Safeguards"83.

"A TREES Safeguard monitoring report template84 is provided for use by Participants if desired. However, Participants may utilize their Summary of Information reports prepared in the context of UNFCCC reporting or similar reports used on Cancun Safeguards outside the UNFCCC insofar as all required information on required indicators is included. Participants may use Safeguard Information Systems in place as an important tool to provide data or systems information to demonstrate conformance as well. For the case of subnational participants under TREES, reporting and monitoring tools to demonstrate conformance with safeguards shall demonstrate coherence and/or alignment with national reporting and monitoring in the context of the UNFCCC"85.

"All indicators apply to all Participants. Where indicators reference a national programme, framework or other requirement, and a Participant is not a national government, the Participant must demonstrate how applicable subnational legislation is aligned and consistent with applicable national legislation"⁸⁶.

5. Climate, Community and Biodiversity Standard⁸⁷

19. The Climate, Community and Biodiversity (CCB) standards and the rules and requirements that operationalize them (collectively referred to as the CCB Programme) "were created to foster the development and marketing of projects that deliver credible and significant climate, community and biodiversity benefits in an integrated, sustainable manner". Up to date 154 REDD+ projects have gone through CCB Standards, with different stages achieved regarding the validation and verification process (see Table 3).

Table 3. REDD+ projects under the CCB Standard

Stage	Number of projects
On hold - see notification letter	8
Project withdrawn	9
Rejected by administrator	2
Under validation	37
Under validation and verification	16
Under verification	19
Validation approved	3

⁸³ ART/TREES Section 12.3

⁸⁴ Available at: https://www.artredd.org/wp-content/uploads/2021/12/TREES-Monitoring-Report-Template-FINAL-Aug-2021.docx

⁸⁵ ART/TREES Section 12.3

⁸⁶ Ibid.

⁸⁷ Information on this section have been extracted and adapted from The Climate, Community & Biodiversity (CCB) Standards - Version 3.1. Available at: https://verra.org/programs/ccbs/

Stage	Number of projects
Validation expired	12
Verification approval requested	10
Verification approved	34
Verification expired	2
Verification public comment period requested	2
TOTAL	154

Source: VERRA Registry (visited on January 15, 2024)

20. The CCB Standards are aligned with and help projects demonstrate that they do not meet the REDD+ Cancun Safeguards in all respects, except—safeguard B of the REDD+ Cancun Safeguards relating to national forest governance structures, which is not applicable to the CCB Programme given that it applies to the project level. The table below illustrates the relationship with Cancun Safeguards.

Table 4 Relationship between REDD+ Cancun Safeguards and CCB Standards

REDD+ Cancun Safeguards	Α	В	С	D	E	F	G
CCB Standards	G5.6 partly (requires compliance only with national and local laws)	Not applicable	G5.1-3	G3.1-6, G5.2-3	B1-4, CM1-4	G1.10- 11	CL3, CM3, B3

Source: CCB Standard (2017)

The complete list of CCB standards is available in the CCB Standard document.

6. REDD+ Social and Environmental Safeguards (SES)88

- 21. **REDD+ SES** provide principles, criteria and indicators and also a country-led, multistakeholder process to support the development and implementation of a safeguards information system for a government-led REDD+ programme. The issues covered by the REDD+ SES and the CCB Standards are very similar, but both standards were developed through separate multistakeholder processes and are differently structured and organized.
- 22. REDD+ SES differs from the CCB Programme in that it is designed to be used by national or subnational jurisdictional (e.g. state, provincial, county) programmes of policies and measures for REDD+ rather than site-based projects. For example, REDD+ SES includes indicators about the contribution of the REDD+ programme to good governance, broader sustainable development and social justice at the national or jurisdictional level and also to biodiversity and ecosystem priorities defined at the

⁸⁸ Extracted from The Climate, Community & Biodiversity (CCB) Standards - Version 3.1. Available at: https://verra.org/programs/ccbs/.

- national jurisdictional level. In contrast, the CCB Standards focus more on respect for rights and generation of benefits for specific communities affected by the project, and for the impacts on biodiversity effected by the project.
- 23. The REDD+ SES indicators are adapted to the country context following a transparent and inclusive multi-stakeholder process defined in the Guidelines for the Use of the REDD+ SES at Country Level. The main way of ensuring the quality and credibility of the self-assessment against the country-specific REDD+ SES indicators is through stakeholder review and a transparent process. This approach enables country leadership in the definition of country-specific safeguards and performance assessment based on the REDD+ SES international norms for high performance. In contrast, the same CCB Standards indicators are used for all projects around the world, and projects achieve validation and verification to the CCB rules through an independent audit of their project descriptions and monitoring reports against the global standards following the process defined in the CCB Programme rules.
- 24. The CCB Programme is used to provide project-level quality assurance, including for projects implemented through a programme of activities or for grouped projects. The CCB Programme may be used for internal quality control within a jurisdiction using REDD+ SES, and the information provided through CCB validation and verification can feed into the assessment done for the whole jurisdiction using REDD+ SES.

7. Pros/cons of safeguards provisions under different REDD+ programmes/initiatives

- 25. From the assessment of the different environmental and social safeguards that are already developed and are being implemented both at a jurisdictional (national and subnational) and project level, it can be concluded that:
 - (a) REDD+ Cancun Safeguards have been a basis for the development of additional requirements other REDD+ initiatives that have developed REDD+ activities at the jurisdictional level (ART/TREES) and project level (CCB Standards);
 - (b) Some initiatives have expanded on the Cancun REDD+ Safeguards by including additional reporting requirements to allow for "verifiable improved performance over time, while providing flexibility" (ART/TREES); and to "help projects to demonstrate that they meet the UNFCCC REDD+ safeguards in all respects" (CCB Standards);
 - (c) In order to demonstrate that a REDD+ project activity is aligned with the Cancun Safeguards, project participants should apply a specific module under the Article 6.4 sustainable development tool (A6.4 SD tool) (presented in the next section).

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Table 5 Pros/cons of safeguards provisions under different REDD+ programmes/initiatives

REDD+ programmes/initiati ves	Consistent with REDD+ Cancun Safeguards	Scale	Pros	Cons
ART/TREES	Yes	Jurisdictional (national and/or subnational)	Provide concrete guidance on how a Participant can demonstrate that it has addressed and respected all the Cancun Safeguards	Do not present specific guidance for REDD+ activities at the project level
GCF RBPs Programme (scorecard)	Yes	Jurisdictional (national and/or subnational)	Determine if a REDD+ programme would be eligible for receiving REDD+ results-based payments	

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REDD+ programmes/initiati ves	Consistent with REDD+ Cancun Safeguards	Scale	Pros	Cons
ССВ	YesNo, except since it does not meet the safeguard B relating to national forest governance structures	Project level	To be applied at project level to address climate, community, and biodiversity benefits in an integrated, sustainable manner	reductions certificates cannot



- 8. Draft principles, criteria, and guiding questions for environmental and social safeguards for REDD+ based on REDD+ Cancun Safeguards principles
- 26. In the context of **Article 6.4 sustainable development tool (A6.4 SD tool),** if a proposed project activity falls under the category of REDD+ according to paragraph 7<mark>04</mark> of decision 1/CP.16, the activity participant shall follow the safeguards referred to in paragraph 2 of appendix I of decision 1/CP.16 (i.e. Cancun REDD+ Safeguards) and, when applicable, the summary of information submitted by a country to explain how the REDD+ Cancun Safeguards are being addressed and respected.⁸⁹
- 27. In order to ensure a consistent approach between REDD+ activities implemented at different levels, REDD+ project activities should be aligned with how the REDD+ Cancun Safeguards are being addressed and respected at the national and/or subnational level.
- 28. The "A6.4 SD tool environmental and social safeguards principles" for REDD+ activities should be assessed using the Cancun Safeguards (see Table 6) in order to avoid unnecessary duplication and/or conflicts with activities that have been already implemented by jurisdictions (at national and/or subnational level).

Table 6 Cancun REDD+ Safeguards in the context of the A6.4 SD tool

Safeguard	Description DRAF	Relationship with the environmental and social safeguards principles of the A6.4 SD tool
Safeguard A	Actions are complementary or consistent with the objectives of national forest programmes and relevant international conventions and agreements	Principle 8 - Land acquisition and involuntary resettlement Principle 10 - Corruption
Safeguard B	Transparent and effective national forest governance structures, taking into account national legislation and sovereignty	
Safeguard C	Respect for the knowledge and rights of Indigenous Peoples and members of local communities by taking into account relevant international obligations, national circumstances and laws, and noting that the United Nations General Assembly has adopted the United Nations Declaration on the Rights of Indigenous Peoples	Principle 4 - Human rights Principle 9 - Indigenous People Principle 11 - Cultural heritage
Safeguard D	The full and effective participation of relevant stakeholders—in particular Indigenous Peoples and local communities	Principle 5 - Labour Principle 6 - Health and safety Principle 7 - Gender equality

⁸⁹ Available at: https://redd.unfccc.int/submissions.html

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Safeguard	Description	Relationship with the environmental and social safeguards principles of the A6.4 SD tool
Safeguard E	Actions are consistent with the conservation of natural forests and biological diversity, ensuring that REDD+ is not used for the conversion of natural forests, but is instead used to incentivize the protection and conservation of natural forests and their ecosystem services, and to enhance other social and environmental benefits	Principle 2 - Air, land and water Principle 3 - Ecology and natural resources
Safeguard F	Actions to address the risks of reversals	
Safeguard G	Actions to reduce displacement of emissions	

29. With the aim to provide specific guidance on how to determine whether the REDD+ project activity is aligned with the Cancun REDD+ Safeguards, specific **guiding questions**⁹⁰ should be answered by REDD+ project activity participants when conducting a do-no-harm risk assessment to identify possible negative environmental and social impacts from REDD+ activities (see tables 8 through 14).

Table 7 Possible responses in the do-no-harm risk assessment

Response	Description	Guidance
Yes	If negative impacts exist for certain principles or if the activity, during its operations, fails to meet the national legal/regulatory requirements or is likely to fail in meeting the legal/regulatory requirements, they will be marked as "yes" as they are likely to cause harm (and may be unsafe).	All negative impacts shall be included in the environmental and social management plan. In case of a lack of legal/regulatory requirements, the activity participant may look at industry best practices or voluntary corporate policies of the organization to assess if the aspects are harmful.
Potentially	This means that the risk or expected issue may be relevant at some point in the activity's cycle but is not necessarily relevant now and/or may never arise.	The requirements apply but the activity may justify with evidence why these requirements do not need to be demonstrated as being met. The activity shall update information on any assessment questions answered with 'potentially' for each monitoring report.
No	This means that the risk or expected issue is not relevant to the activity.	Justification shall be provided to support this conclusion, with evidence provided where required.

⁹⁰ The guiding questions are based on ART/TREES themes.

Response	Description	Guidance
NA	This means that the question is not relevant to the activity and its potential impact.	Activity participants are required to justify exclusion of any principles.

- 8.1. Safeguard A Complementarity or consistency with objectives of national forest programmes and relevant international conventions and agreements
- 8.1.1. Safeguard A stipulates that REDD+ actions should be complementary or consistent with the objectives of national forest programmes and relevant international conventions and agreements.

8.1.1.1. Safeguard A criteria:

- 30. S.A.1: REDD+ project activities shall complement or be consistent with the objectives of national forest programmes.
- 31. S.A.2: REDD+ project activities shall be consistent with the objectives of relevant international conventions and agreements.

Table 8. Guiding questions for the do-no-harm risk assessment on complementarity or consistency with objectives of national forest programmes and relevant international conventions and agreements

with objecti	A - Complementarity ives of national fore nt international co	est programmes	Host country regulations	Generic risk assessments	
Principle level question	Has the activity participant identified any risk that the proposed REDD+ project activity will not complement or be consistent with objectives of national forest programmes and relevant international conventions and agreements?	☐ Yes ☐ Potentially ☐ No			
Additional g	Additional guiding question:				
S.A.1	Do the REDD+ project activities have any risk of compromising consistency with the objectives of	☐ Yes ☐ Potentially ☐ No ☐ N/A			

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with object	A - Complementarity ives of national fore nt international co	est programmes		
	national forest programmes?			
S.A.2	Do the REDD+ project activities have any risk of compromising consistency with the objectives of relevant international conventions and agreements?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Conclusion of the do-no-harm risk assessment on Safeguard A - Complementarity or consistency with objectives of national forest programmes and relevant international conventions and agreements:				☐ Yes ☐ Potentially ☐ No ☐ N/A

8.1.2. Safeguard B - Transparent and effective national forest governance structures

32. Safeguard A stipulates that REDD+ actions should be transparent and based on effective national forest governance structures, taking into account national legislation and sovereignty.

8.1.2.1. Safeguard B criteria:

- 33. S.B.1: REDD+ project activities shall respect, protect, and fulfil the right of access to information.
- 34. S.B.2: REDD+ project activities shall promote transparency and prevent corruption, including through the promotion of anti-corruption measures.
- 35. S.B.3: REDD+ project activities shall respect, protect and fulfil land tenure rights.
- 36. S.B.4: REDD+ project activities shall respect, protect, and fulfil access to justice.

Table 9. Guiding questions for the do-no-harm risk assessment on transparent and effective national forest governance structures

Safeguard B - Transparent and effective national forest governance structures			Host country regulations	Generic risk assessments
Principle level question	Has the activity participant identified any risk that the REDD+ project activity will not be transparent and effective with regard to national	☐ Yes ☐ Potentially ☐ No		

Safeguard B - Transparent and effective national forest governance structures			Host country regulations	Generic risk assessments
	forest governance structures?			
Additional g	quiding question:			
S.B.1	Do the REDD+ project activities have any risk of compromising the respect, protection, and fulfilment of the right of access to information?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
S.B.2	Do the REDD+ project activities have any risk of compromising transparency and prevention of corruption?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
S.B.3	Do the REDD+ project activities have any risk of compromising the respect for and protection of land tenure rights	☐ Yes ☐ Potentially ☐ No ☐ N/A		
S.B.4	Do the REDD+ project activities have any risk of compromising respect, protection, and access to justice?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Conclusion of the do-no-harm risk assessment on Safeguard B - Transparent and effective national forest governance structures:				☐ Yes ☐ Potentially ☐ No ☐ N/A

8.1.3. Safeguard C - Respect for the knowledge and rights of Indigenous Peoples and members of local communities

37. Safeguard C stipulates that REDD+ actions should respect the knowledge and rights of Indigenous Peoples and members of local communities.

8.1.3.1. Safeguard C criteria:

- 38. S.C.1: REDD+ project activities shall identify Indigenous Peoples and local communities, or equivalent.
- 39. S.C.2: REDD+ project activities shall respect and protect traditional knowledge.

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40. S.C.3: REDD+ project activities shall respect, protect and fulfil the rights of Indigenous Peoples and/or local communities, or equivalent.

Table 10. Guiding questions for the do-no-harm risk assessment on respect for the knowledge and rights of Indigenous Peoples and members of local communities

•	C - Respect for the kindigenous Peoples and numities	•	Host country regulations	Generic assessments	risk
Principle- level question	Has the activity participant identified any risk that the REDD+ project activity will not respect the knowledge and rights of Indigenous Peoples and members of local communities?	☐ Yes☐ ☐ Potentially☐ No			
Additional	guiding question:				
S.C.1	Do the REDD+ project activities have any risk of compromising the identification of Indigenous Peoples and local communities, or equivalent?	☐ Yes ☐ Potentially ☐ No ☐ N/A			
S.C.2	Do the REDD+ project activities have any risk of compromising the respect and protection of traditional knowledge?	☐ Yes ☐ Potentially ☐ No ☐ N/A			
S.C.3	Do the REDD+ project activities have any risk of compromising the respect, protection, and rights of Indigenous Peoples and/or local communities, or equivalent?	☐ Yes ☐ Potentially ☐ No ☐ N/A			
Respect fo	n of the do-no-harm rish r the knowledge and rig of local communities:		_	☐ Yes ☐ Potentially ☐ No	

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Safeguard C - Respect for the knowledge and rights of Indigenous Peoples and members of local communities	Host country regulations	Generic assessments	risk
		□ N/A	

8.1.4. Safeguard D - Full and effective participation of relevant stakeholders (in particular Indigenous Peoples and local communities)

41. Safeguard D stipulates that REDD+ actions should ensure full and effective participation of relevant stakeholders (in particular Indigenous Peoples and local communities).

8.1.4.1. Safeguard D criteria:

- 42. S.D.1: REDD+ project activities shall respect, protect and fulfil the right of all relevant stakeholders to participate fully and effectively in the design and implementation of REDD+.
- 43. S.D.2: REDD+ project activities shall promote adequate participatory procedures for the meaningful participation of Indigenous Peoples and local communities, or equivalent.

Table 11. Guiding questions for the do-no-harm risk assessment on full and effective participation of relevant stakeholders (in particular Indigenous Peoples and local communities)

relevant st	D - Full and effective akeholders (in partic ed local communities)	ular Indigenous	Host country regulations	Generic risk assessments
Principle level question	Has the activity participant identified any risk that the REDD+ project activity will not promote the full and effective participation of relevant stakeholders (in particular Indigenous Peoples and local communities)	☐ Yes ☐ Potentially ☐ No		
Additional	guiding question:			
S.D.1	Do the REDD+ project activities have any risk of compromising the respect, protection, and the right of all relevant stakeholders to participate fully and effectively in the	☐ Yes ☐ Potentially ☐ No ☐ N/A		

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relevant sta	Safeguard D - Full and effective participation of elevant stakeholders (in particular Indigenous Peoples and local communities)		Host country regulations	Generic risk assessments
	design and implementation of REDD+?			
S.D.2	Do the REDD+ project activities have any risk of compromising the promotion of adequate participatory procedures for the meaningful participation of Indigenous Peoples and local communities, or equivalent	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Conclusion of the do-no-harm risk assessment on Safeguard D - Full and effective participation of relevant stakeholders (in particular Indigenous Peoples and local communities):				☐ Yes ☐ Potentially ☐ No ☐ N/A

8.1.5. Safeguard E - Consistency with the conservation of natural forests and biological diversity

44. Safeguard E stipulates that REDD+ actions should be consistent with the conservation of natural forests and biological diversity.

8.1.5.1. Safeguard E criteria:

- 45. S.E.1: REDD+ project activities shall not promote the conversion of natural forests and other natural ecosystems.
- 46. S.E.2: REDD+ project activities shall protect natural forests and other natural ecosystems, biological diversity, and ecosystem services.
- 47. S.E.3: REDD+ project activities shall promote the enhancement of social and environmental benefits.

Table 12. Guiding questions for the do-no-harm risk assessment on consistency with the conservation of natural forests and biological diversity

	E - Consisten n of natural forests		Host country regulations	Generic risk assessments
Principle level question	Has the activity participant identified any risk that the REDD+	☐ Potentially		

Safeguar conserva diversity	ntion of natural forests	-	Host country regulations	Generic risk assessments
	project activity will not be consistent with the conservation of natural forests and biological diversity?			
S.E.1	Do the REDD+ project activities have any risk of promoting the conversion of natural forests and other natural ecosystems?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
S.E.2	Do the REDD+ project activities have any risk of compromising the protection of natural forests and other natural ecosystems, biological diversity, and ecosystem services?	☐ Yes ☐ Potentially ☐ No ☐ N/A	FT	
S.E.3	Do the REDD+ project activities have any risk of compromising the promotion of enhancing social and environmental benefits?	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Conclusion of the do-no-harm risk assessment on Safeguard E - Consistency with the conservation of natural forests and biological diversity:			☐ Yes ☐ Potentially ☐ No ☐ N/A	

8.1.6. Safeguard F - Actions to address the risks of reversals

48. Safeguard F stipulates that REDD+ actions should address the risk of reversals.

8.1.6.1. Safeguard F criteria:

49. S.F.1: REDD+ project activities shall integrate the risks of reversals in activity design, prioritization, implementation and periodic assessment.

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Table 13. Guiding questions for the do-no-harm risk assessment on actions to address the risks of reversals

Safeguard F - Actions to address the risks of reversals		Host country regulations	Generic risk assessments	
Principle level question	Has the activity participant identified any risk that the REDD+ project activity will not have actions to address the risks of reversals?	☐ Yes ☐ Potentially ☐ No		
Additional g	uiding question:			
S.F.1	Do the REDD+ project activities have any risk of compromising the integration of the risk of reversals in the activity design, prioritization, implementation and periodic assessment?	☐ Yes ☐ Potentially ☐ No ☐ N/A	FT	
Conclusion of the do-no-harm risk assessment on Safeguard F - Actions to address the risks of reversals:			on Safeguard F -	☐ Yes ☐ Potentially
				 □ No □ N/A

8.1.7. Safeguard G - Actions to address the risks of reversals reduce displacement of emissions

50. Safeguard G stipulates that REDD+ actions should reduce the displacement of emissions.

8.1.7.1. Safeguard **F-G** criteria:

51. S.G.1: REDD+ project activities shall integrate the risks of displacement of emissions in the activity design, prioritization, implementation and periodic assessment.

Table 14. Guiding questions for the do-no-harm risk assessment on actions to reduce displacement of emissions

Safeguard G – Actions to reduce displacement of emissions		Host country regulations	Generic risk assessments	
Principle level question	Has the activity participant identified any risk that the REDD+ project activity will not have actions to reduce	☐ Yes ☐ Potentially ☐ No		

Safeguard G – Actions to reduce displacement of emissions		Host country regulations	Generic risk assessments	
	displacement of emissions?			
Additional g	uiding question:			
S.G.1	Do the REDD+ project activities have any risk of compromising the integration of the risks of displacement of emissions in the activity design, prioritization, implementation and periodic assessment.	☐ Yes ☐ Potentially ☐ No ☐ N/A		
Conclusion of the do-no-harm risk assessment on Safeguard G - Actions to reduce displacement of emissions:				☐ Yes ☐ Potentially ☐ No ☐ N/A

- 52. For the purpose of **validation and/or verification procedures** (established under sections 7 and 8 of the A6.4 SD tool, respectively), the DOE shall assess the information provided in the above tables; conduct interviews with local stakeholders and employ professional judgement, taking into consideration the requirements and outputs of national and/or subnational REDD+ safeguards processes.
- 53. Specific "normative references" related to REDD+ activities need to be included in the A6.4 SD tool, in particular:
 - (a) Decision 1/CP.16, appendix I Guidance and safeguards for policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries;
 - (b) Decision 12/CP.17 Guidance on systems for providing information on how safeguards are addressed and respected;
 - (c) Decision 12/CP.19 The timing and the frequency of presentations of the summary of information on how all the safeguards referred to in decision 1/CP.16, appendix I, are being addressed and respected; and
 - (d) Decision 17/CP.21 Further guidance on ensuring transparency, consistency, comprehensiveness and effectiveness when informing on how all the safeguards referred to in decision 1/CP.16, appendix I, are being addressed and respected.

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Appendix 2. Principles and criteria for environmental and social safeguards for novel CO₂ removals activities under the [draft] sustainable development tool for the Article 6.4 mechanism

1. Acronyms and abbreviations

AFOLU Agriculture, forestry and other land use

AR6 IPCC Sixth Assessment Report

BECCS Bioenergy with carbon capture and storage

CDM Clean development mechanism

CDR Carbon dioxide removal CEW Coastal enhanced weathering

CMA Conference of Parties serving as the meeting of the Parties to the Paris

Agreement

DACCS Direct air carbon dioxide capture and geological storage

ERW Enhanced rock weathering EW Enhanced weathering

IPCC Intergovernmental Panel on Climate Change

LC/LP 1972 London Convention on Marine Dumping and 1996 London Protocol

OSPAR Oslo-Paris Convention on Protection of the NE Atlantic

REDD+ Reducing emissions from deforestation and forest degradation in developing

countries and sustainable forest conservation and enhancement of forest

carbon stocks

RMP Rules, modalities, and procedures (for the Article 6.4 mechanism)

SB Supervisory Body of the Article 6.4 mechanism

SD Sustainable development VCM Voluntary carbon market

2. Introduction

2.1. Background

1. Decision 3/CMA.3 sets down the rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement (Article 6.4 mechanism). Thereunder,

Paragraph 5(c) requests the Supervisory Body of the Article 6.4 mechanism to review the sustainable development tool in use for the clean development mechanism (CDM) and other tools and safeguards systems in use in existing market-based mechanisms to promote sustainable development with a view to developing similar tools for the mechanism by the end of 2023.

Paragraph 6(c) requests the Supervisory Body to elaborate and further develop recommendations on activities involving removals including, inter alia, the avoidance of other negative environmental and social impacts in addition to the Article 6.4 activity cycle (chapter V of the annex).

Paragraph 24(a) of the annex requests Supervisory Body to establish the requirements and processes necessary to operate the Article 6.4 mechanism including, inter alia, 24(a)(x) and 24(a)(xi) relating to the application of robust, social and environmental safeguards and the development of tools and approaches for assessing and reporting information about how each activity is fostering sustainable development, while

acknowledging that the consideration of sustainable development is a national prerogative.

2. Cognizant of these requests, the Supervisory Body, at its seventh meeting, requested the United Nations Framework Convention on Climate Change (UNFCCC) secretariat to, inter alia:1

"Provide relevant safeguards necessary to avoid and/or minimize negative environmental and social impacts on activities involving emission reductions and/or removals reflecting latest decisions and discussion at Supervisory Body with a view to fulfil the mandate in paragraph 5 (c) of decision 3/CMA.3;

Provide separate module/guiding questions for REDD+ projects/agriculture, forestry and other land use (AFOLU)/Cancun Safeguards;"

- 3. The draft Supervisory Body recommendation on activities involving removals under the Article 6.4 mechanism (version 01.1)² requires that robust social and environmental safeguards be applied by activity participants in accordance with requirements in:
 - (a) The Article 6.4 mechanism activity standard;
 - (b) The draft Article 6.4 mechanism sustainable development tool (A6.4 SD tool):
 - (c) Guidance on local and global stakeholder consultation;
 - (d) The Appeals and Grievance Procedure (where applicable);
 - (e) Any other applicable provisions developed by the Supervisory Body.

Furthermore, the draft Supervisory Body recommendation also states that in addition to the above:

"the Supervisory Body will develop further requirements in respect of specific removal activity categories or types, taking into account national and international best practices in environmental and social safeguards."

2.2. Purpose

4. The purpose of this document is to support the "Development of a sustainable development tool for the Article 6.4 mechanism of the Paris Agreement" (A6.4 SD tool) pursuant to the RMPs, paragraphs 5, 6 and 24, and the request of the Supervisory Body at its seventh meeting based on a review of existing environmental and social safeguards of carbon dioxide removals activities.

2.3. Scope

- 5. The Supervisory Body has developed a draft A6.4 SD tool³ and recently invited comments from stakeholders on it and is in the process of integrating the inputs received.
- 6. Furthermore, the UNFCCC secretariat has consulted with technical experts in respect of two specific aspects of the draft A6.4 SD tool: (1) consideration of safeguard requirements

¹ A6.4-SB007 – Meeting report (paragraphs 19(e) and (f)).

² A6.4-SB009-A02 - Recommendation: Activities involving removals under the Article 6.4 mechanism. Version: 01.1 (paragraphs 62 and 63).

³ A6.4-SB008-AA-A10: Draft Tool: Article 6.4 sustainable development tool (v.02.0)

for REDD+ and AFOLU activities; and (2) any additional specific safeguard requirements for other novel removal activities.

- 7. This report addresses item (2): additional safeguard requirements for novel removal activities.
- 8. Without prejudice to the forthcoming Supervisory Body recommendation to the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) on activities involving removals, the assessment herein considers removal methods where carbon is intended to be stored in the geosphere, the soil carbon pool and/or the oceanic water column (hereinafter referred to collectively as novel technological carbon dioxide removal (CDR) methods, or "novel CDR").
- 9. Removal of atmospheric methane, nitrous oxides or other greenhouse gases (GHGs) is not considered in this document.

3. Potential hazards, impacts and risks of novel CDR

- 10. Unlike emission reduction activities that can prevent the formation and release of GHG emissions to the atmosphere, CDR methods remove already-formed GHGs from the atmosphere and store it in enhanced terrestrial carbon sinks and reservoirs.⁴
- 11. Novel processes involved in the capture of carbon dioxide (CO₂) and the enhancement of various carbon sinks and reservoirs can present new types of impacts, hazards and risks relative to emission reduction activities. These include:
 - (a) **Capture**: the environmental impacts of energy and materials utilized in CO₂ capture processes, the transport of captured carbon, and its application to, or injection into, carbon sinks and reservoirs. In addition, impacts arising from the release of matter into the environment for the purpose of CO₂ capture and the potential impacts and risks to the environment and local communities when exposed to such materials or to CO₂ leaking from capture and transport activities; and
 - (b) **Storage**: the environmental impacts on the relevant media used for the storage of carbon, including over the long-term; potential impacts on in situ materials; potential mobilization of materials into the environment; potential impacts of carbon release from storage reservoirs; and/or the environmental impacts of the precipitation of mobilized materials or other biproducts relating to CDR methods.
- 12. A summary of possible risks, as well as potential co-benefits, posed by novel CDR methods is set out below (see Table 1).

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Rather than direct atmospheric removal, some novel CDR methods involve the transfer of carbon from the fast atmosphere-biosphere carbon cycle into the slower soil and geological carbon cycle (see Friedlingstein et al. 2023). Examples include bioenergy with carbon capture and geological storage (BECCS), biochar application to soil, bio-oil injection into geological reservoirs, biomass burial.

Table 1. Summary of risks, impacts, co-benefits, trade-offs and spillovers for novel CDR

CDR method	Risks and impacts	Co-benefits	Trade-offs and spillover effects
Direct air capture with geological storage (DACCS)	Increased energy and water use (with some options). Can lead to GHG emissions or competition for renewable energy.	Water produced (solid sorbent direct air capture designs only)	Potentially increased emissions from water supply and energy generation
Enhanced weathering	Mining impacts; air quality impacts of rock dust when spreading on soil. Heavy metal contamination, especially nickel and chromium, from some rock types.	Enhanced plant growth, reduced erosion, enhanced soil carbon, reduced soil acidity, enhanced soil water retention	Potentially increased emissions from water supply and energy generation.
Ocean alkalinity enhancement	Increased seawater pH and saturation states may have local adverse impacts on marine biota. Possible release of nutritive or toxic elements and compounds may perturb marine ecosystems. Mining impacts	Limiting ocean acidification	Potentially increased emissions of CO ₂ and dust from mining, transport and deployment operations
Ocean fertilization	Nutrient redistribution, restructuring of the ecosystem, enhanced oxygen consumption and acidification in deeper waters could perturb marine ecosystems. Could encourage toxic algae. The fraction of removed CO ₂ reaching durable storage is uncertain, due to remetabolization. Potential for decadal-to-millennial-scale return to the atmosphere of nearly all the extra carbon removed, risks of unintended side effects	Increased productivity of fisheries, reduced upper ocean acidification	Subsurface ocean acidification, deoxygenation; altered meridional supply of macronutrients as they are utilized in the ironfertilized region and become unavailable for transport to, and utilization in, other regions, fundamental alteration of food webs and biodiversity.

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CDR method	Risks and impacts	Co-benefits	Trade-offs and spillover effects
Bioenergy with carbon capture and storage	Competition for land and water resources to grow biomass feedstock if based on purpose-grown biomass feedstock. Loss of biodiversity, carbon stock and soil fertility if from an unsustainable biomass harvest. Use of potentially contaminated biomass residues (such as post-consumer wood waste) can pose air pollution risks.	Reduction of air pollutants, fuel security, optimal use of residues, additional income, health benefits and, if implemented well, possibility to enhance biodiversity, soil health and land carbon	Competition for land with biodiversity conservation and food production.
Biochar	Particulate and GHG emissions from production; biodiversity and carbon stock loss from unsustainable biomass harvest. Use of potentially contaminated biomass residues (such as postconsumer wood waste) can pose air pollution risks.	Increased crop yields and reduced non- CO ₂ emissions from soil; resilience to drought	Environmental impacts associated with particulate matter; competition for biomass resources

Source: Babiker et al. (2022); Table 12.6. Smith et al. (2023); Table 1.1

13. Drawing from information in Table 1, the Intergovernmental Panel on Climate Change (IPCC), in its sixth assessment report (AR6) noted that:

"CDR governance and policymaking are expected to focus on responsibly incentivising RD&D and targeted deployment, building on both technical and governance experience with already widely practised CDR methods like afforestation/reforestation...learning from two decades of slow-moving CCS [carbon dioxide capture and storage] deployment... [and] ...for some less well-understood methods and implementation options, such as ocean alkalinisation or enhanced weathering, investment in RD&D can help in understanding the risks, rewards, and uncertainties of deployment." (Babiker et al 2022; p.1277).

- 14. The view of the IPCC on CDR governance indicates that there are uncertainties in the scientific understanding of the potential risks and impacts associated with some novel CDR methods, while some CDR methods have known risk management precedents that can be drawn from (especially geological storage).
- 15. Risks and impacts of novel CDR were also identified by stakeholders in submissions to the UNFCCC secretariat.⁵ These included many general concerns about risks and impacts on the environment, biodiversity, specific ecosystems, local communities and Indigenous Peoples and the risks of non-permanence and carbon reversal. Many stakeholders, while pointing out benefits of CDR, also call for the requirement for, inter alia:
 - (a) Activity participants are to address the following in relation to their proposed CDR activities:

A6.4-SB007-AA-A13 – Information note: Compilation of the public inputs on removal activities under the Article 6.4 mechanism.

- (i) Identify potential negative environmental or social impacts, and any tradeoffs and how they were addressed;
- (ii) Develop an environmental and social management plan to monitor and mitigate any identified potential negative environmental or social impacts;
- (iii) Demonstrate, prior to each issuance, that important potential negative impacts have been appropriately monitored and mitigated to the extent possible;
- (iv) Identify and adhere to any national or local legal requirements which may be relevant to the project.
- (b) The below might be also considered by the Supervisory Body:
 - (i) Establish the framework for the above requirements;
 - (ii) Establish a dispute and grievance redress mechanisms and procedures;
 - (iii) Consider third-party standards (e.g. climate, community and biodiversity standard).

Many of these requirements are already reflected in the draft A6.4 SD tool.

4. Existing approaches to addressing risks and impacts

16. As noted by the IPCC (Babiker et al. 2022), some existing precedents and examples exist that support the governance of risks and impacts presented by CDR methods. A snapshot of the experiences in identifying, managing and regulating the potential negative impacts and risks of novel CDR are considered below, including previous experiences under the Kyoto Protocol.

4.1. Geostorage-based CDR

17. These techniques involve the physical capture of CO₂ either directly from air (DACCS) or from biogenic sources (BECCS) using chemical sorbents, its processing and injection into subsurface geological reservoirs for the purpose of long-term isolation from the atmosphere. One novel CDR method involves the production of 'bio-oil' and its injection into geological reservoirs for the purpose of long-term storage.

4.2. Laws and regulations applicable to geological CO₂ storage

- 18. At a national and regional level, Australia, Canada, the European Union, Indonesia and the United States of America including their respective states, provinces and territories have established rules and standards for geological CO₂ storage. Examples of dedicated geological CO₂ storage laws include the 2008 Victoria State Greenhouse Gas Geological Sequestration Act, the 2009 EU Directive on the geological storage of CO₂ ('the CCS Directive') and the 2011 U.S. SDWA Underground Injection Control (UIC) Class VI well rule.
- 19. At an international level, the 1972 Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Convention) and the 1996 Protocol to the Convention (London Protocol; collectively the "LC/LP") and the Oslo-Paris Convention on Protection of the North East Atlantic (OSPAR) also establish requirements for geological CO₂ storage in the marine environment. Under the LC/LP and OSPAR, injection and storage of CO₂ directly in the water column ('oceanic CO₂ storage') is prohibited (see

paragraphs below for their role in ocean-based CDR), while geological CO₂ storage under the seabed is allowed subject to applying the following:

- (a) LC/LP: 2012 Specific Guidelines for the Assessment of Carbon Dioxide for Disposal into Sub-Seabed Geological Formations (LC 34/15, annex 8);
- (b) OSPAR: Guidelines for Risk Assessment and Management of Storage of CO₂ Streams in Geological Formations.
- 20. The 2006 IPCC Guidelines for Greenhouse Gas Inventories (Vol. 2, Chapter 5; IPCC 2006) also outline detailed reporting approaches for countries hosting CO₂ transport and geological storage operations.
- 21. ISO has also established a wide-ranging set of standards for CCS activities.
- 22. In all cases, risk, safety and impact management lie at the core of their objectives. The detailed requirements of each of the rules and standards are too extensive to present here.⁶

4.3. CCS under the clean development mechanism

- 23. At COP 17 in Durban, South Africa (2011), Parties to the Kyoto Protocol adopted decision 10/CMP.7, setting out modalities and procedures for CCS in geological formations as CDM project activities.
- 24. That decision took around six years of negotiations, stemming from questions and concerns from the CDM Executive Board at its 22nd meeting in 2005 that were raised in response to the submission of a CDM methodology for CCS activities.⁷
- 25. A synthesis of views of Parties and observer organizations prepared in 2011 ahead of COP 17 identified the following risks for CCS activities (see Box 1). 8 These risks are the same as those posed by novel CDR methods involving CO₂ capture with geological storage.

Details of laws and regulations can be accessed through the IEA database at: https://www.iea.org/data-and-statistics/data-tools/ccus-legal-and-regulatory-database. ISO standards can be found at: https://www.iso.org/committee/648607/x/catalogue/p/0/u/1/w/0/d/0

[&]quot;The Board considered the general issue of carbon capture and storage as CDM project activities but could not come to an agreement. The Board agreed to request guidance from the COP/MOP on whether carbon capture and storage projects can be considered as CDM project activities taking into account issues relating to project boundary, leakage and permanence." Report of the twenty-second meeting of the CDM EB, November 2005, para 23.

FCCC/SBSTA/2011/INF.7 "Synthesis of views on modalities and procedures for carbon dioxide capture and storage in geological formations as clean development mechanism project activities". Note by the secretariat. 4 August 2011.

Box 1. Risks of CCS identified by Parties and Observers under the Kyoto Protocol

- 41. The main types of risk, safety and environmental impacts of CCS projects, as identified in submissions, include:
 - (a) Damage to the environment and ecosystem health due to, inter alia:
 - (i) Emissions to the air and associated pollution (e.g. sulphur oxides, nitrogen oxides, dust and mercury);
 - (ii) Solid waste generation;
 - (iii) Water consumption;
 - (iv) Noise and vibration;
 - (b) Specific risks associated with CO₂ containment failure, resulting in leaks from both above-ground and subsurface installations, including:
 - (i) Contamination of underground sources of drinking water;
 - (ii) Affects on the chemical properties of seawater;
 - (iii) Human health and safety and ecosystem damage associated with accumulations of CO₂ at dangerous levels in non-turbulent air.
- 42. The risk of continuous slow seepage or sudden mass release of CO₂ from storage sites can arise as a result of the buoyancy and pressure associated with injected CO₂. Submissions highlight a number of scenarios that could arise, drawing on the 2005 IPCC Special Report on Carbon Dioxide Capture and Storage [IPCC 2005], including:
 - (a) Seepage along injection well(s) or an abandoned well(s);
 - (b) Seepage along a fault or fracture;
 - (c) Seepage along storage formation stratum;
 - (d) Seepage through the caprock.
- 43. Other types of risk identified in submissions include risks associated with potential leaks from CO₂ pipelines located in densely populated and/or ecologically sensitive areas and risks to the integrity of measurement, verification and reporting.
- 70. Seepage, whether it occurs in the short, medium or long-term, presents a range of risks, which, as outlined in various submissions, can be categorized as:
 - (a) Local risks. These relate to any impacts on and damage to the immediate surroundings, including the local environment, human health and/or property and other economic resources;
 - (b) Global climate risks. These relate to the release of CO₂ back into the atmosphere.

Source: FCCC/SBSTA/2011/INF.7.

26. To control the identified risks, Parties agreed on specific participation requirements for Parties wishing to host CCS CDM activities (see Box 2). In addition, appendix B to the annex to decision 10/CMP.7 contains specific, detailed, requirements for undertaking geological storage risk assessments and environmental and social impact assessments.

Box 2. Participation requirements for Parties wishing to host CCS CDM activities

- 8. A Party not included in Annex I to the Convention may only host a CCS project activity under the CDM if it has submitted an expression of its agreement to the UNFCCC secretariat to allow the implementation of CCS project activities in its territory and provided that it has established laws or regulations which:
 - (a) Set procedures that include provisions for the appropriate selection, characterization and development of geological storage sites, recognizing the project requirements for CCS project activities under the CDM set out in appendix B to this annex;
 - (b) Define means by which rights to store carbon dioxide in, and gain access to, subsurface pore space can be conferred to project participants;
 - (c) Provide for timely and effective redress for affected entities, individuals and communities for any significant damages, such as environmental damage, including damage to ecosystems, other material damages, or personal injury caused by the project activity, including in the post-closure phase;
 - (d) Provide for timely and effective remedial measures to stop or control any unintended seepage of carbon dioxide, restore the integrity of a geological storage site, and restore long-term environmental quality significantly affected by a CCS project activity;
 - (e) Establish means for addressing liability arrangements for carbon dioxide geological storage sites, taking into account the provisions set out in paragraphs 22 to 25 of appendix B to this annex;
 - (f) For a host Party that accepts the obligation to address a net reversal of storage in the situation referred to in paragraph 26 below, establish measures to fulfil such an obligation.

Source: Decision 10/CMP.7.

4.4. Methodologies in the voluntary carbon market

- 27. Several methodologies for BECCS, DACCS and/or CCS have been promulgated in the voluntary carbon market (VCM), including under the registries of Puro.earth, Verra (in conjunction with the CCS+ Initiative), American Carbon Registry, Gold Standard and the Global Carbon Council.
- 28. All of these methodologies operate under the general safeguards applied by each of the registry operators. Furthermore, all methodologies set some sort of requirements for site selection, design, management and closure to control leakage. Various approaches are also set down in respect of managing non-permanence, including non-permanence risk tools (Verra; Gold Standard, in reference to the California Standard) and the use of buffer accounts (Verra; Gold Standard; Global Carbon Council).
- 29. Additional specific requirements for assessing potential environmental and community impacts of activities under these standards are summarized below (see Table 2).

Table 2. Environmental and social safeguards for geological CO₂ storage in the VCM

Registry	Aspects addressing environmental and social safeguards
Puro.earth	Puro.earth has established the 'Geologically Stored Carbon Methodology v2021' that is applicable to DACCS and BECCS activities. The methodology requires that activities "should do no net harm to the environment (e.g. cause deforestation, loss of biodiversity or harm to society through loss of arable land and decreased food security, chemical emissions or health risks)." Safeguards are covered under the 'General Puro Standard requirements' that require, inter alia, that CO ₂ removal suppliers demonstrate environmental and social safeguards and that the production facilities do no significant harm to the surrounding natural environment or local communities. For BECCS activities, the methodology requires that biomass must be 'sustainable' in accordance with the sustainable biomass criteria as defined in the EU Renewable Energy Directive II or similar criteria, even if the biomass is not purpose-grown but residues or side streams are used.
Verra	CCS+ has been taking a modular approach to developing a wide-reaching CO ₂ capture, use, and geological storage methodology using Verra's framework. The CCS+ methodologies do not impose specific requirements to assess environmental and community impacts. Rather, under Verra, the VCS Standard V4.5 requires that all projects shall "not negatively impact local communities or environments". Various other requirements for project developers are nested in the Verra system.
American Carbon Registry	The ACR has established the "Methodology for the Quantification, Monitoring, Reporting and Verification of Greenhouse Gas Emissions Reductions and Removals from Carbon Capture and Storage Projects - Version 1.1", which applies to DACCS. It requires that project proponents submit an impact assessment to ensure compliance with environmental and community safeguards best practices. The project's impact on the environment and community must be net positive. Projects must describe the safeguard measures in place to avoid, mitigate, or compensate for potential negative impacts, and how such measures will be monitored, managed, and enforced. The GHG Project Plan must include a mitigation plan for any foreseen negative community or environmental impacts and shall disclose in their annual attestations any negative environmental or community impacts made during the reporting year.
Gold Standard	Gold Standard has published the 'Methodology for Biomass Fermentation with Carbon Capture and Geologic Storage Version 1.0'. The methodology requires that projects conduct a Safeguarding Principles Assessment and conform to GS Safeguarding Principles and Requirements. The assessment covers nine principles: P.1 human rights; P.2 gender equality and women's empowerment; P.3 community health and safety; P.4 cultural heritage, Indigenous People, displacement and resettlement; P.5 corruption; P.6 economic impacts; P.7 climate and energy; P.8 water; P.9 environment, ecology and land use. Furthermore, projects shall not undermine or conflict with any national, subnational or local regulations or guidance relevant to the project activity. A site closure plan must show no significant risk that injected CO ₂ will have a significant adverse impact on the environment or human health.

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Registry	Aspects addressing environmental and social safeguards
Global Carbon Council	The GCC has published a draft 'Methodology for Project Activities Involving the Capture, Transport and Geological Storage of Carbon Dioxide'. Under the methodology, where dedicated rules and standards for geological CO ₂ storage are locally absent, activity proponents must prepare and submit studies based on the GCC Guidance for Geological Storage V01. The guidance document sets out detailed methods and procedures for, inter alia: (1) undertaking a risk and safety assessment; and (2) assessing environmental and social risks. The guidance is also encouraged to be followed as best-practice even where local regulations are applied.

- 30. In addition those described above, the following methodologies have also been proposed by various firms and registries operating in the novel CDR area:
 - (a) Isometric (a new dedicated CDR registry platform) and Carbon Direct (an advisory firm) have both developed methodologies for bio-oil injection into geological reservoirs. 9,10 Both methodologies rely on the United States Underground Injection Control (UIC) rules to provide regulatory oversight of the injection activities;
 - (b) Drax and Stockholm Exergi (both energy generation and supply firms) have jointly developed a methodology for BECCS.¹¹ It relies on operators adhering to local laws and regulations for CO₂ storage and contains significant guidance on the sustainability of biomass sourcing;
 - (c) Det Norske Veritas (verification firm), CarbonFix (a firm specializing in basalt CO₂ storage) and Climeworks (a DAC supplier) have a methodology for the DACCS that involves storage in mafic rocks (basalt) through mineralization.¹²

4.5. International Emissions Trading Association High Level Criteria for Crediting Geostorage Activities

- 31. Over the period 2021–2022, the International Emissions Trading Association (IETA) undertook a member-led work programme to establish common principles and accounting standards for the treatment of geological storage of CO₂ within carbon markets.
- 32. Drawing on precedents from CDM, IPCC 2006 and methodologies in the VCM, among other things, it proposes 6 methodological principles and 10 safeguard areas that should be addressed for the integration of geological CO₂ storage in crediting programmes, as summarized below (see Figure 4).¹³

⁹ Bio-oil Geological Storage v1.0 https://science.isometric.com/protocol/bio-oil-geological-storage.

¹⁰ Bio-oil Sequestration: Prototype Protocol for Measurement, Reporting, & Verification https://www.carbon-direct.com/insights/a-new-proto-protocol-for-bio-oil-sequestration

Methodology for measuring net carbon dioxide removal through bioenergy with carbon capture and storage. https://www.drax.com/wp-content/uploads/2023/10/Exec-Summary-BECCS-Methodology-Drax-and-Stockholm-Exergi-v0.9.pdf

Permanent and Secure Geological Storage of CO2 by In-Situ Carbon Mineralization.https://climeworks.com/uploads/images/transport-&-geological-storage methology carbfix 2022.pdf

Details of the methodological principles and safeguards can be accessed at IETA's website. https://www.ieta.org/ initiatives/high-level-criteria-for-carbon-geostorage-activities/

Figure 4. International Emissions Trading Association high-level safeguards for CO₂ geostorage in crediting mechanisms

SAFEGUARD AREA			HIGH LEVEL CRITERIA
	01.	SIGNIFICANT AND COST-EFFECTIVE FOR NATIONAL CLIMATE MITIGATION	
	POLITICAL ACCEPTABILITY	02.	ALIGNED WITH NATIONAL DEVELOPMENT PRIORITIES AND POLICY AIMS
		03.	WIDESPREAD PUBLIC ACCEPTANCE
	LEGAL AND REGULATORY FRAMEWORK FOR SAFE STORAGE	04.	LEGAL BASIS FOR INJECTION AND STORAGE
* *		05.	EFFECTIVE SITE SELECTION AND DEVELOPMENT
$\overline{\nabla} T_{\overline{\nabla}}$		06.	ROBUST OVERSIGHT OF SITE OPERATION AND CLOSURE
		07.	LONG-TERM LIABILITY
V		08.	RISK AND SAFETY ASSESSMENT
	ENVIRONMENTAL AND SOCIAL SAFEGUARDS	09.	ENVIRONMENTAL AND SOCIAL IMPACTS
		10.	SUSTAINABILITY

Source: IETA (2022) https://ieta.b-cdn.net/wp-content/uploads/2023/09/IETA HighLevelCriteriaforCreditingGeostorageActivities.pdf

4.6. Ocean-based CDR

- 33. A range of methods fall under the ambit of ocean-based CDR, including:
 - (a) Coastal enhanced weathering (CEW)
 - (b) Ocean alkalinity enhancement/alkalinization (OAE)
 - (c) Electrochemical oceanic carbon removal and storage (direct removal of bicarbonate and carbonate from seawater, and conversion to CO₂ for geological storage)
 - (d) Ocean fertilization/artificial upwelling (AU)/ocean storage of biomass (OSB).
- 34. In most cases, the methods rely on modifying the partial pressure of CO₂ in seawater by changing pH through alkalinization (i.e. charge balancing of base cations produced during weathering by the formation of bicarbonate (HCO₃-) ions). Alkalinzation of sea water leads to air-sea gas exchanges that remove CO₂ from the atmosphere to store in into seawater in the form of bicarbonate so as to restore equilibrium partial pressure.
- 35. The change in pH is achieved by either adding alkaline materials or through removal of carbon from seawater. In the case of CEW and OAE, material such as calcium- and magnesium-rich silicate crushed rock mined from mafic and ultramafic sources such as basalt is added to the ocean. In the case of ocean fertilization, carbon is removed from seawater through biomass fixing (growth and sinking). Electrochemical techniques directly remove carbon from seawater.

4.7. Laws and regulations applicable to ocean protection

36. Much of the world's oceans are protected under various international legal conventions and frameworks, including:

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- (a) The 1982 UN Convention on the Law of the Sea (UNCLOS)
- (b) The 1972 and 1996 LC/LP (see above)
- (c) Regional seas policies and pollution prevention frameworks (for example, the OSPAR Convention, Kuwait Protocol, South-East Pacific Protocol, Mediterranean Protocol etc.).
- 37. CDR activities based in the ocean, and especially those involving the addition of materials to the ocean (e.g. fertilization by adding iron filings; alkalinization by adding crushed rock), are generally covered by these marine protection treaties.¹⁴
- 38. In these respects, the following already applies under the LC/LP:
 - (a) 2008 resolution (LC-LP.1; adopted), which states that ocean fertilization activities fall within the purview of the LC/LP and that such activities other than legitimate scientific research should not be allowed:
 - (b) 2010 resolution (LC-LP.2; adopted) setting out an 'Assessment Framework for Scientific Research involving Ocean Fertilization', which requires that proposed research projects should be assessed to determine if they qualify as legitimate scientific research (see Box 3);
 - (c) 2013 amendments to the London Convention which will, when in force, create a legally-binding regime controlling marine geoengineering techniques (by establishing a formal assessment framework for any materials to be placed into the ocean for the purposes of geoengineering).
- 39. More recently, a meeting of Parties to the LC/LP in October 2023 considered, among other things: (1) ocean alkalinity enhancement; and (2) biomass cultivation for CDR (including seaweed cultivation and sinking) as emerging forms of ocean-based novel CDR.¹⁵ The ensuing "Statement on Marine Geoengineering" issued by Parties says that the techniques have:
 - "...the potential for deleterious effects that are widespread, long-lasting or severe" [and that] "there is considerable uncertainty regarding their effects on the marine environment, human health, and on other uses of the ocean." 16

The statement also reaffirms that ocean-based CDR activities should be deferred other than in connection with "legitimate scientific research".

¹⁴ Under the LC/LP, the deliberate disposal of waste or other matter into the sea is prohibited with the exception of activities subject to the reverse list of acceptable wastes or other matter that may be disposed of at sea (i.e. a list of substances for which the blanket prohibition is reversed), and the relevant frameworks thereunder.

⁴⁵th Consultative Meeting of Contracting Parties to the London Convention and the 18th Meeting of Contracting Parties to the London Protocol (LC 45/LP 18).

https://www.imo.org/en/MediaCentre/MeetingSummaries/Pages/LC-45-LP-18.aspx.

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Box 3. Summary of the LC/LP Assessment Framework for Ocean Fertilization

The 2010 resolution LC-LP.2 defines ocean fertilization as any activity undertaken by humans with the principal intention of stimulating primary productivity in the oceans.

The Assessment Framework established thereunder provides a tool for assessing proposed activities to determine if they constitute legitimate scientific research that is not contrary to the aims of the LC/LP. The resolution requires the following assessment to be carried out:

- 1. Initial assessment (to determine whether a proposed activity falls within the definition of ocean fertilization and has proper scientific attributes)
- 2. Environmental assessment
 - a. Problem formulation
 - b. Site selection and description
 - c. Exposure assessment
 - d. Effects assessment
 - e. Risk characterization risk management
- 3. Decision-making (in respect of the assessment)
- 4. Results of monitoring (of the approved activity)

Notably, the Initial Assessment states that "there should not be any financial and/or economic gain arising directly from the experiment or its outcomes", which may preclude the issuance of credits for such activities.

- (a) Source: Annex 6 of the Report of the 2010 Meeting of the Contracting Parties to the London Convention and Protocol
- 40. Notably, marine protection laws in some cases also apply to land-based sources of marine pollution. For example,
 - (a) UNCLOS Article 194, 207 and 213 requires Parties to take measures to reduce and control any source of marine pollution, including land-based sources;
 - (b) OSPAR Article 3 requires Contracting Parties to take, individually and jointly, all possible steps to prevent and eliminate pollution from land-based sources.
- 41. These clauses may bring other novel CDR methods within the purview of the marine protection laws in situations where the ultimate fate of CDR products and by-products is the ocean (e.g. enhanced weathering see para below).
- 42. Party reporting of GHG emissions and removals inventories does not extend to the ocean. Thus, IPCC Guidelines do not exist for ocean-based CDR methods.

4.8. Methodologies in the voluntary carbon market

43. VCM registries have yet to develop ocean-based CDR methodologies. Isometric reports that it is in the process of developing an "Ocean Alkalinity Enhancement v1.0" methodology. Tocial Carbon has a "Methodology for the treatment of Harmful Algae Blooms (SCM007)", which pertains to the removal of biomass from freshwater bodies by sinking (lakes etc). Report of the treatment of Harmful Algae Blooms (SCM007).

4.9. Other novel CDR

44. Biochar, and, to an extent, enhanced weathering (EW) involve the storage of inorganic carbon in soil, and in the case of biomass burial, storage of organic carbon in soil inside an inert chamber.

https://science.isometric.com/protocols.

https://www.socialcarbon.org/scm0007.

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- (a) Biochar is produced from the combustion of organic material in a low or zero oxygen environment (pyrolysis), and the grinding of the resultant char material. The biochar product is bagged and sold as a soil conditioner that is directly applied to soil, with the potential to remain in the soil in an inert state for long periods of time:
- (b) EW methods involve the application of crushed rocks (e.g. calcium- and magnesium-rich silicate rocks mined from mafic and ultramafic sources such as basalt) to land (usually cropland) and coastal environments (e.g. beaches). The method relies on hydrolysis and carbonation reactions (chemical weathering) to break down the rocks (i.e. the silicate–carbonate geochemical cycle). These 'weathering' reactions liberate base cations, which leads to the conversion of atmospheric CO₂ to dissolved inorganic carbonate (primarily bicarbonate; HCO₃·). Dissolved bicarbonate may leave the soil in drainage water. Dissolved inorganic carbon may also be sequestered through the formation of soil carbonate minerals (pedogenic carbonate, but with lower sequestration rates than bicarbonate formation);
- (c) Biomass burial involves the interment of organic material (trees, other residues) in secure, non-perishable chambers in the earth. The capture and preservation of biogenic material prevents its natural decomposition and the release of stored carbon back to the atmosphere as CO₂.
- 45. In the case of EW, carbon storage in the form of bicarbonate and carbonate ions may take place in the ocean either through the direct placement of weathering materials in beach environments (CEW) or through run-off from EW-treated land into the ocean.

4.10. Laws and regulations applicable to soil protection

- 46. In all cases, projects will need to comply with prevailing policies, laws and regulations relating to the conservation and preservation of soil. Such laws can be wide ranging, including planning laws and environmental impact assessment (EIA) requirements, or agricultural guidelines relating to the treatment of soil used for growing crops and livestock.
- 47. Notably, deposition of bicarbonate into the marine environment from land-based sources could fall within the ambit of some international ocean protection conventions such as UNCLOS and OSPAR (see above).
- 48. The IPCC has proposed draft guidelines for the integration of biochar additions to soil within methods for national cropland, grassland and forestland GHG emissions and removals inventories (IPCC 2019).
- 49. No IPCC guidance exists for the treatment of EW or biomass burial in national GHG inventories.

4.11. Methodologies in the voluntary carbon market

50. Puro.earth has established methodologies for biochar¹⁹ and terrestrial biomass storage,²⁰ and has been pioneering discussions on EW methodologies over the past two years.²¹

¹⁹ Biochar Methodology v2 (January 2022). https://carbon.puro.earth/biochar

Terrestrial Storage of Biomass Methodology v1 (November 2023) https://connect.puro.earth/woody-biomass-burial

²¹ Enhanced Rock Weathering Methodology blog post (September 2022). https://puro.earth/articles/enhanced-rock-weathering-in-soil-methodology-public-consulta-788?type=webinars-and-videos

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Verra has established a methodology biochar²² and is in the process of developing a EW methodology.²³ Isometric reports that it is developing an EW methodology, although it is not in the public domain at the time of writing.²⁴ Safeguarding requirements included in these methodologies are summarized below (see Table 3).

Table 3. Environmental and social safeguards for other novel CDR in the VCM

Method	Registry	Aspects addressing environmental and social safeguards		
Biochar	Puro.earth	Biochar must be produced from sustainable biomass: sustainably sourced biomass, or waste biomass such as agricultural waste, biodegradable waste, urban wood waste or food waste. The CO ₂ supplier must demonstrate that the production facility activities do no significant harm to the surrounding natural environment or local communities, using the following:		
		 Environmental impact assessment (EIA) Environmental permit Other documentation When applicable, informed consent from local communities and other affected stakeholders and have a policy in place to address potential grievances. 		
	Verra	Acceptable feedstocks include: agricultural waste; food processing residues; forestry and wood processing waste; recycling economy; aquaculture plants; animal manure; and high-carbon fly ash. Application must comply with biochar materials standards to avoid transferring heavy metals and organic contaminants to soil, and must meet various testing standards. Non-soil applications include cement, asphalt or other materials where long-term storage is possible. Biochar is also covered by the Voluntary Carbon Standard V4.5, which requires that all projects shall "not negatively impact local communities or environments".		

²² Methodology for Biochar Utilization in Soil and Non-Soil Applications v1 (VM0044). https://verra.org/methodology-for-biochar-utilization-in-soil-and-non-soil-applications/

²³ Methodology for Atmospheric Carbon Removal through use of Volcanic Basalt Soil Treatments. https://verra.org/methodologies/methodology-for-atmospheric-carbon-removal-through-use-of-volcanic-basalt-soil-treatments/

²⁴ Enhanced Weathering in Agriculture v1.0 https://science.isometric.com/protocol/enhanced-weathering-agriculture

Method	Registry	Aspects addressing environmental and social safeguards	
EW	Puro.earth	The planned methodology will require registered projects to take account of:	
		 Rock toxicity levels: (e.g Ca, Mg) must be analysed and risks assessed. EU thresholds for inorganic soil improvers used as benchmark. Rock sourcing: must be done in line with local regulations. Application site: environmental risk assessment and food safety assessment must be carried out. Right or authorization to spread must be provided. Local communities: evidence of informed consent, including acceptable contaminant levels and environmental risks, plus ongoing engagement. Occupational hazards: measures taken to mitigate health and safety risks. Surrounding ecosystems: low risk of negative impact, including soil, biodiversity, water, air. Crop quality and yield reports. Will also be covered by the 'General Puro Standard requirements' that requires, inter alia, that CO₂ removal suppliers demonstrate environmental and social safeguards and that the production facilities do no significant harm to the surrounding natural environment or local communities. 	
Biomass burial	Puro.earth	Eligible biomass: lignocellulosic biomass (LCB) from plants mainly composed of polysaccharides (cellulose and hemicelluloses) and an aromatic polymer (lignin), making a complex assembly of polymers naturally recalcitrant to enzymatic decomposition. The CO ₂ supplier must demonstrate that do not pose significant threat to the surrounding natural environment. Environmental risks must be assessed (e.g. environmental impact assessment (EIA); environmental risk assessment (ERA); etc). The EIA must focus, on inter alia: • Sourcing of the biomass • Transport or harvesting of the biomass • The activity relating to creating the storage chamber/s • Site selection for storage • Design of the storage chamber/s • Long term monitoring of consistent chamber conditions.	
		Local stakeholder consultation and occupational health and safety measures must be implemented.	

5. Options to address environmental and social safeguards for novel CDR under the Article 6.4 mechanism

- 51. Novel CDR methods pose environmental and social risks that are different and additional to those posed by emission reduction activities. This is evident from the additional safeguarding requirements and rules being applied to these activities by lawmakers and registry operators in the VCM.
- 52. Based on the review of potential risks and impacts of novel CDR methods, and measures adopted to date to manage such risks, two options are proposed for addressing risks under the Article 6.4 mechanism, as set out below.

- 53. In reviewing the options, it is important to remain mindful that:
 - (a) The eligibility of certain CDR methods under the Article 6.4 mechanism may be affected by ongoing deliberations on the Supervisory Body's recommendation on removals to the CMA;
 - (b) The Supervisory Body already has a draft A6.4 SD tool, which offers comprehensive coverage of a wide range of environmental and social impacts that could arise from the implementation of mitigation activities under the Article 6.4 mechanism, including removals;
 - (c) Mechanism methodologies developed by the Supervisory Body can also provide a basis for addressing specific environmental and social issues posed by novel CDR methods. These requirements would be backstopped by environmental and social safeguard principles and criteria already established in the draft A6.4 SD tool.

5.1. Option 1: Rely on the draft A6.4 SD tool in its current format to establish safeguards for novel CDR, and reinforce where necessary

- 54. This option would involve using the draft A6.4 SD tool as currently drafted to address environmental and social risks posed by novel CDR. Like other Article 6.4 activities, participants developing novel CDR activities would need to assess the environmental and social safeguards following the principles and criteria contained in the draft A6.4 SD tool.
- 55. A provisional expert review of the draft A6.4 SD tool in respect of novel CDR methods has been undertaken, taking account of the potential impacts and existing approaches towards their management (see sections 2 and 3). Initial indications are that the draft A6.4 SD tool already covers many safeguarding aspects that may be relevant and applicable to mitigation activities involving novel CDR methods.
- 56. Examples of topics already covered in the draft A6.4 SD tool and how they can pertain to novel CDR methods are set out below (see Table 4).

Table 4. Examples of linkages between the draft A6.4 SD tool and specific environmental and social risks posed by novel CDR methods

Principle	Criteria/question	Relevance to novel CDR	Modifications to reinforce novel CDR linkage
P1.1	Climate – does not risk increasing GHG emissions	Requires activity participants to consider the emissions associated with materials and energy used by novel CDR methods (e.g. energy for DACCS; mining of minerals for EW). Should also be covered at the methodology level (e.g. activity emissions; leakage emissions).	None needed
P3.1	Natural resources – conservation of soil.		Add reference to this risk within draft A6.4 SD tool.

Principle	Criteria/question	Relevance to novel CDR	Modifications to reinforce novel CDR linkage
P3.2	Ecology – protect and conserve terrestrial, freshwater, coastal and marine biodiversity	Some ocean-based CDR methods may pose uncertain deleterious effects that are widespread, long-lasting or severe on ocean ecosystems.	Add reference to relevant decisions and requirements under marine protection treaties within the SD tool.
P6/6.1	Human health and safety of affected communities	Safety of communities in proximity to CO ₂ transport (pipelines) and storage sites. Also covered previously in decision 7/CMP.10, appendix B (Risk and safety assessment).	Could be reinforced at the methodological level, with cross-reference to the draft A6.4 SD tool (P6) in the methodology.
		Spreading of fine rock dust on cropland, beaches, etc. for EW purposes can lead to airborne release of fine particulates that could lead to respiratory problems. (see also P2.1).	Risks of these activities could be highlighted.

- 57. In some cases, the existing principles, criteria and guiding questions could be modified to highlight and reinforce aspects specific to novel CDR methods, as indicated in the examples above (see Table 4).
- 58. Notably, for some novel CDR methods, there are intimate links between the risk of non-permanence and carbon reversal, and the risk to the environment and local communities (e.g. risks posed by leaking CO₂ in the case of transport and geological CO₂ storage). Consequently, in addressing non-permanence, methodologies for some novel CDR methods will inevitably need to at least partially address environmental and social safeguards.

5.2. Option 2: Add new specific annex(es) to the draft A6.4 SD tool to establish safeguards for novel CDR

- 59. This option would involve the preparation of a separate annex or annexes within the draft A6.4 SD tool that sets out specific environmental and social safeguard principles and criteria applicable to novel CDR methods. Activity participants developing novel CDR activities would need to assess the specific environmental and social safeguard principles and criteria in the relevant draft A6.4 SD tool annex(es).
- 60. The annex(es) in the draft A6.4 SD tool would include detailed/comprehensive environmental and social safeguard principles and criteria specific to each novel CDR method (with possibilities to update requirements in the future should new novel CDR methods emerge under the Article 6.4 mechanism).
- 61. The participation requirements and other aspects of decision 10/CMP.7 (see box 2) and the IETA High-Level Criteria for Crediting Geostorage Activities (see Figure 4 1) are examples that could be drawn upon to inform and guide the development of specific safeguard principles and criteria.

62. Since different novel CDR methods can present new types of impacts, hazards and risks relative to emission reduction activities, the approach requires the CMA/ Supervisory Body to adopt a clear definition of novel CDR methods that are eligible under Article 6.4 mechanism.

6. Conclusions

- 63. A range of risks and impacts relating to novel CDR methods have been identified and summarized in the literature (IPCC, among others; Babiker et al. 2022). The IPCC A6 suggests that the governance of novel CDR could involve responsibly incentivizing RD&D and targeted deployment, building on both technical and governance experience with analogous mitigation techniques that are already widely practised (e.g. forestation, CCS). For some less well-understood methods (e.g. OAE or EW), the IPCC AR6 notes that investment in RD&D can help improve the understanding of the risks, rewards, and uncertainties of deployment.
- 64. Some of the identified risks and impacts are already subject to regulation under national, regional and international laws and agreements especially geological CO₂ storage and ocean-based CDR under marine protection treaties. Other novel CDR methods involving the storage of carbon in soil, for example, have received less attention in these respects (e.g. biochar, enhanced weathering, biomass burial).
- 65. Registries operating in the VCM, especially Puro.earth, have been pioneering methodological approaches to novel CDR (e.g. DACCS, BECCS, biochar, EW and biomass burial). Other VCM methodologies also consider novel CDR methods such as bio-oil injection and mineralization. These experiences further shed light on the potential risks and impacts of novel CDR methods and the ways in which they can be addressed and managed.
- 66. Two options by which to implement environmental and social safeguard principles and criteria for novel CDR methods are outlined: (1) rely on the current format of the draft A6.4 SD tool (perhaps with some further reinforcing); or (2) add dedicated annex(es) to the draft A6.4 SD tool specific to novel CDR methods. A rapid assessment of possible advantages and disadvantages of each are set out below (see Table 5).
- 67. A provisional expert review of the draft A6.4 SD tool in respect of novel CDR, taking account of the potential impacts and existing approaches towards their management outlined has been undertaken. The analysis suggests that many safeguarding aspects that may be relevant and applicable to mitigation activities involving novel CDR methods may be already well-covered.

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Table 5. Rapid assessment of options to implement safeguards for novel CDR methods under the Article 6.4 mechanism

Approach	Advantages	Disadvantages
Option 1: Rely on the draft A6.4 SD tool as drafted (and reinforce where necessary)	Builds upon the existing requirements for all Article 6.4 activities in a consistent manner for all mitigation activities. Would establish one set of safeguards for all mitigation activities, including novel CDR methods. No delay to the completion of the A6.4 SD tool.	Further analysis may be warranted to determine whether the draft A6.4 SD tool fully addresses all concerns over the risks and impacts posed by novel CDR methods. Environmental and social concerns specific to novel CDR methods not covered in the draft A6.4 SD tool would need to be addressed in the relevant methodologies.
Option 2: Add new specific annex(es) to the draft A6.4 SD tool	Clearly identifies the specific SD requirements for novel CDR activities. Would require activity participants to clearly and transparently address specific risks of novel CDR methods.	Further analysis would be required to develop the annex(es). Delays completion of the A6.4 SD tool until CMA/SB clearly defines the scope of novel CDR methods. The draft A6.4 SD tool risks becoming bloated with requirements, adding further burdens for activity participants.

- 68. For all the options presented, it is important to remain mindful that:
 - (a) The eligibility of certain CDR methods under the Article 6.4 mechanism may be affected by ongoing deliberations on the Supervisory Body recommendation to the CMA; and
 - (b) The mechanism methodologies developed by the Supervisory Body could provide an important basis for addressing environmental and social safeguards for specific novel CDR methods.

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A6.4-SB010-AA-A05 Tool: Draft Tool

Article 6.4 sustainable development tool

Version 04.0

Version	Date	Description
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