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Application of the Öko-Institut/WWF/EDF methodology for assessing the quality of carbon credits

This document presents results from the application of version 3.0 of a methodology, developed by Oeko-Institut, World Wildlife Fund (WWF-US) and Environmental Defense Fund (EDF), for assessing the quality of carbon credits. The methodology is applied by Oeko-Institut with support by Carbon Limits, Greenhouse Gas Management Institute (GHGMI), INFRAS, Stockholm Environment Institute, and individual carbon market experts. This document evaluates one specific criterion or sub-criterion with respect to a specific carbon crediting program, project type, quantification methodology and/or host country, as specified in the below table. Please note that the CCQI website Site terms and Privacy Policy apply with respect to any use of the information provided in this document. Further information on the project and the methodology can be found here: www.carboncreditquality.org

Criterion:	3.1 Significance of non-permanence risks
Project type	Recovery of associated gas from oil fields
Date of final assessment:	31 January 2023
Score:	The project type does not involve a material non-permanence risk

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Assessment

Criterion 3.1

Relevant scoring methodology provisions

The methodology evaluates the non-permanence risk of the project type. If the project type is deemed not to have a material non-permanence risk, then quality objective 3 is assigned a score of 5. If there is a material risk of non-permanence, the assessment depends on the outcome of criterion 3.2. The following table provides an overview for which types of mitigation activities non-permanence risks are considered material and for which not:

Mitigation activity	Non-permanence risk	Example activities
Destruction of non-CO_2 gases	No risk: No reservoir involved. The destruction cannot be physically reversed.	HFC-23 destruction from HCFC-22 production
Avoidance of formation of non-CO_2 gases, without effecting the amount of carbon stored in reservoirs	No risk: No reservoir involved. The process cannot be physically reversed.	Reducing CH_4 emissions from rice cultivation, ruminant livestock or organic waste diversion
Reducing demand for fossil fuels	No material risk within time horizon relevant for avoiding dangerous climate change (except for possible lock-in effects in the case of activities that lead to a long-term increase in energy or feedstock demand).[1]	Adoption of renewable energy; energy efficiency measures
Reducing demand for non-renewable biomass (thereby reducing forest degradation)	Material risks: natural disturbance risks and anthropogenic factors.	Efficient cook stove projects
Enhancing, preserving, or slowing depletion of terrestrial carbon reservoirs	Material risks: The size of the risk depends on spatial scale, how underlying drivers are addressed, and stability of the reservoir(s) affected by the mitigation activity.	Afforestation/reforestation; improved forest management; avoided deforestation/conversion; soil carbon enhancements; peatland preservation or "rewetting"; etc.
Storing carbon in geologic reservoirs	Material risks: The size of the risks mainly depends on reservoir stability.	Carbon capture and storage (CCS BECCS, DACCS, or other)
Preventing or extinguishing accidental uncontrolled burning of fossil fuels	Material risks: The size of the risks mainly depends on reservoir stability.	Extinguishing or preventing ignition of fires at waste coal piles

[1] An example of such a lock-in effect is a project that installs new natural gas infrastructure, with a technical lifetime of 30 years, to replace an existing oil-based heating system. In the absence of the project, the existing oil-based system would be replaced after 10 years by a new heating system that comes to the market and that operates on 100% renewable energy. In this case, the emission reductions that the natural gas system achieves in the first 10 years of its operation would be reversed in the subsequent 20 years if not replaced by less GHG intensive technology. The project is thus locking in a fossil fuel based solution for the 30 years while renewable energy solution become available.

Preventing or slowing exploitation of fossil fuel reserves	Material risks: If the protection measure is discontinued, the reservoir may be depleted.	Protecting an oil field from being extracted

Information sources considered

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Assessment outcome

The project type is considered not to involve a material non-permanence risk.

Justification of assessment

This assessment refers to the following project type:

“Recovery and utilization of associated gas from oil fields. This includes the installation of infrastructure to gather and transport the recovered gas to a gas processing plant. Part of the recovered gas may be used to meet on-site energy demands. In the baseline scenario, the associated gas would be vented or flared. The project type reduces emissions by (i) displacing the use of fossil fuels and, where applicable, (ii) reducing venting of methane.”

The displacement of fossil fuels under this project type is not considered to involve a material non-permanence risk within the time horizon relevant for avoiding dangerous climate change. The project type does not involve any material lock-in effects which could lead to non-permanence risks as referred to in footnote 1 above.

The avoidance of methane emissions from venting is not associated with the preservation or enhancement of carbon reservoirs. In this case, there is no physical process by which the avoided methane emissions can be undone. Therefore, these emission reductions are permanent.