


CCQI
 Carbon Credit
 Quality Initiative

Application of the CCQI 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

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| Sub-criterion: | 3.1 Significance of non-permanence risks |
| Project types: | Avoided planned deforestation Avoided unplanned deforestation |
| Assessment based on carbon crediting program documents valid as of: | 15 May 2022 |
| Date of final assessment: | 02 July 2024 |
| Score: | These project types involve a material non-permanence risk. |

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 |
| 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 |

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

Information sources considered

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Assessment outcome

The project type is considered to involve a material non-permanence risk.

Justification of assessment

This assessment refers to the following project types:

Avoided planned deforestation:

“Activities to avoid deforestation that is legally authorized and planned by an identifiable, commercial agent. In addition, forest degradation may be reduced. The activities are implemented on a dedicated project level geographical area (not at jurisdictional level). The project type reduces emissions by avoiding the loss of forest carbon stocks.”

Avoided unplanned deforestation:

“Activities to avoid deforestation that is driven by multiple, mostly local agents. The deforestation occurs as a result of socioeconomic forces, such as subsistence agriculture of local communities, encroaching roads, or illegal logging. In addition, forest degradation may be reduced. Projects usually combine different activities to reduce deforestation, such as improving agricultural practices of local communities, providing alternative livelihoods, instituting patrols or assisting with land tenure reform. The activities are implemented on a dedicated project-level geographical area (not at jurisdictional level). The project type reduces emissions by avoiding the loss of forest carbon stocks.”

Table 26 of the scoring methodology defines afforestation activities, such as avoided deforestation, to have a material non-permanence risk, as these activities enhance terrestrial carbon reservoirs. Forests can be subject to natural depletion through natural disturbances such as fire, disease, drought or windstorms. Additionally, they may be susceptible to different types of human-caused depletion, such as from demand for wood, or for land needed for subsistence, agricultural production, or development. The size and scale of carbon reservoirs affected by a mitigation activity is another important factor in assessing reversal risk. For activities implemented at the scale of projects, the effect of a wildfire could be catastrophic in terms of reversing prior carbon gains.

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.