



Methodology for Determining the Uncertainty or Discount Factor for Individual UK Carbon Code of Conduct (UKCCC) Projects and Land Use Methods Applied

Introduction

This methodology provides a framework for calculating the uncertainty or discount factor to be applied to individual UKCCC projects, particularly those involving land use, land-use change, and forestry (LULUCF) activities. This helps ensure accurate and conservative estimation of greenhouse gas (GHG) emissions reductions and carbon sequestration. This methodology shall be used by project developers to suggest an initial discount factor to be approved or amended by the UKCCC commissioner.

In all instances 3% of credits from each project are held in the UKCCC National Reserve.

1. Definitions

- **Uncertainty Factor:** A percentage reduction applied to account for uncertainties in GHG emission reduction or removal estimates, ensuring that reported reductions are conservatively stated.
- **Discount Factor:** A percentage reduction applied to the estimated GHG benefits of a project to account for potential overestimation and to enhance the credibility of carbon credits.

2. Determining Uncertainty and Discount Factors

Step 1: Data Collection

- Collect historical data and peer-reviewed research relevant to the specific land use practices and regional conditions of the project.
- Gather empirical data from the project or similar projects, focusing on actual GHG emissions and removals, environmental impacts, and management practices.

Step 2: Statistical Analysis

- Analyse the data to determine variance and confidence intervals for GHG emissions reductions and sequestration estimates.
- Compare data to empirical data from similar project types

Step 3: Expert Elicitation



- Engage with experts in land use, forestry, ecology, and carbon modelling to review the data and analysis, and to provide insights on potential sources of uncertainty not captured in the statistical analysis.
- Document expert opinions and consensus on uncertainty ranges for key variables.

Step 4: Application of Risk Factors

- Identify risk factors specific to the project, such as pest outbreaks, fire risk, management confidence and economic factors that may impact land use practices and permanence.
- Adjust uncertainty and discount factors based on the likelihood and potential impact of these risks.

Step 5: Determination of Discount Factors

- Apply a conservative baseline discount factor to all projects, reflecting common uncertainties associated with project type and region.
- Adjust the baseline discount factor based on project-specific uncertainties and risks identified in previous steps.
- Use a tiered approach, where projects with higher uncertainty and risk receive higher discount factors.
- Projects that are based predominantly on a regenerative agriculture transition shall apply a minimum of 20% discount factor between baseline and verification audits.
- The minimum discount factor in any event shall be 5% plus 3% as a contribution to the UKCCC National Reserve.

3. Specific Considerations for Land Use Methods

Land Use, Land-Use Change, and Forestry (LULUCF)

- **Afforestation/Reforestation:** Consider species-specific growth rates, local climatic conditions, and soil characteristics. Adjust for risks like fire and disease.
- **Soil Carbon Sequestration:** Factor in variations in soil types, management practices and commitment (e.g., tillage, cover cropping), and climatic conditions.
- **Agroforestry:** Address complexities due to the combination of agriculture and forestry practices, including interactions between tree and crop species.

4. Validation and Verification

- Conduct periodic validations and verifications by accredited third parties to assess the ongoing accuracy of GHG estimations and the appropriateness of applied uncertainty and discount factors.



- Adjust methodology based on findings from validations and lessons learned from project implementations.

5. Documentation and Reporting

- Document all methodologies, data sources, calculations, and expert inputs transparently to support verification and stakeholder review.
- Provide detailed justifications for the chosen uncertainty and discount factors, ensuring they are reasonable and reflect conservative GHG accounting.

Conclusion

This methodology ensures that all UKCCC projects apply rigorous, data-driven, and transparent approaches to accounting for uncertainties in GHG emissions reductions and removals. By applying appropriate uncertainty and discount factors, the UKCCC enhances the reliability and credibility of its carbon credits, fostering trust among stakeholders and supporting the achievement of the UK's climate goals.