Policy Brief | 22.05.2025



Second assessment of the draft technical specifications for certification under the EU CRCF

Agriculture and agroforestry on mineral soils

// Anne Siemons and Lambert Schneider

Summary of key findings and recommendations

This document provides an assessment of the proposed draft for an EU certification methodology on agriculture and agroforestry on mineral soils (referred to as "draft methodology") provided on 15 April 2025.

Overall, the draft methodology, in its current form, ignores fundamental principles of carbon crediting and does not comply with the quality criteria established under the CRCF. Applying the methodology would result in the issuance of units that do not represent any actual emission reductions or removals. Key issues identified include:

- Overall, the draft methodology lacks details on how the requirements shall be operationalised and implemented. In many sections, requirements are formulated as general principles, but it remains unclear how compliance with these requirements must be demonstrated and will be checked. Further elaboration of the methodology is therefore necessary to turn it into a technical document with clear and unambiguous instructions, which operators can rely upon when developing their activities.
- Leakage risks are not addressed appropriately and can lead to large overestimation of removals or emission reductions: The methodology does not consider potentially large sources of leakage, neither from shifting activities to other land nor from indirect land-use change. Provisions to address potential carbon leakage have been removed from the draft methodology. The draft methodology does not account for the risk that carbon removals or soil emission reductions on certified parcels are compensated by an increase in soil emissions on other land (under the operational control of the operator or elsewhere). The draft methodology simply states that carbon farming activities

that improve soil management are unlikely to result in carbon leakage because crop or grass production is maintained and the long-term resilience of such production is enhanced (p. 28). This is not appropriate as the proposed activities impact the agricultural product range produced from a specific land parcel. For example, improving crop rotations or converting arable land for fodder crops to permanent grassland imply that the amount of a specific agricultural product produced from this land is reduced (i.e. a specific crop is cultivated less frequently; amount of fodder crops is reduced) so that activity shifting to other land could occur to meet the demand for this product. Not accounting for such leakage effects may lead to significant overestimation of removals or emission reductions. In the eligibility criteria, it is stated that there shall be no significant loss of organic carbon stocks on the land under the operational control of the operator due to land use change such as conversion of grassland to cropland or of forest land to cropland (section 1.1, p. 13). However, it is not specified how this should be demonstrated or verified. Guidance must be added to the draft methodology on how leakage to other parcels is to be identified and what would be the consequences of leakage for quantifying carbon removals and emission reductions achieved through the respective activity. We recommend addressing leakage risks through applying default factors in the quantification of achieved emission reductions or removals. Tools and methodologies to account for leakage effects are available from other carbon crediting programmes and should be used.

- We support the current proposal to only quantify changes on the parcels where the activities take place and quantify N₂O emissions at the level of the whole farm holding. Farm-level monitoring for carbon stocks may imply high burden for operators and involves large uncertainties due to a low signal-to-noise ratio (i.e. there might be significant fluctuations of carbon stocks on land on which no carbon farming activity is implemented due to other factors; the impact of carbon farming activities is difficult to measure due to high soil heterogeneity across area and this uncertainty is aggravated if carbon farming activities are implemented only on a small share of the land under the control of an operator).
- High flexibility to choose between different models, methods and approaches is not a robust approach to quantification: The draft methodology provides different options that operators can chose from to quantify the mitigation impact of practices that increase carbon removals or reduce emissions from agricultural soils (section 2.2). These options include tier 3 models (eligible for quantifying carbon removals, LULUCF soil emissions and agricultural soil emissions), ground-based measurements (eligible for quantifying carbon removals and LULUCF soil emission), data calibration models using remote sensing data (eligible for quantifying carbon removals in biomass), and tier 1 and tier 2 emission factors (eligible for quantifying agriculture soil emissions or associated GHG emissions). Experience from improved forest management and avoided deforestation projects in the voluntary carbon markets have shown that flexibility to choose between different quantification approaches makes methodologies vulnerable to adverse selection as operators will likely apply those models that result in highest emission levels in baseline scenarios. This has led to considerable overestimation of emission reductions.
- Provisions on accounting for uncertainty of quantification approaches are not appropriate: The provisions for accounting for uncertainty in section 2.7 lack specification as it is not clear how the uncertainty deduction factor is to be calculated and applied. Additionally, uncertainty regarding the *assumptions* which tier 3 models (quantification

approach 1) are based upon do not seem to be accounted for. Furthermore, it is not appropriate to assume that the prediction error of tier 1 or tier 2 emission factors for quantifying N₂O emissions from managed soils (quantification approach 4) is zero. Applying tier 1 or tier 2 emission factors for N₂O emissions from managed soils may lead to overestimating emissions and thus also emission reductions claimed through changing fertilising practices. These provisions should be revised to ensure that achieved carbon removals and emission reductions are quantified in a conservative manner.

Multi-layered exemptions for demonstrating additionality create high risks to register many projects that do not need CRCF funding to become viable: The many exemptions that the draft methodology provides for project operators in section 3 to demonstrate additionality of carbon farming activities on agricultural soils are very concerning. Operators must demonstrate that the activity is not legally imposed on them. However any activity remains additional during the entire activity period, even if it became obligatory for the operator under national legislation. This means that if an activity becomes legally imposed during the activity period, operators would be entitled to non-additional carbon removals and soil emission reduction units under the methodology for the remainder of the activity period. Such an approach creates unfairness and arbitrariness in treating different operators on agricultural land. An operator who did not register an activity with the CRCF before the activity became obligatory under national legislation would have to bear the full cost to fund the necessary activities for complying with such a law. An operator who did register with the CRCF would be subsidised with CRCF units to fulfil the same legal obligations as the other operator.

Operators must further demonstrate that the activity is not financially viable without the incentives created by the CRCF. For this, they must conduct either a simple cost analysis or an investment comparison analysis. However, under the draft methodology, activities are exempt from conducting these financial viability tests if they already receive state aid or public subsidies. Automatic exemption only applies if public subsidies have a "clawback" mechanism (i.e. must be repaid once CRCF revenues become available) or do not cover the same aspects as the activity proposed for CRCF funding (e.g., smaller area, different eligible costs, smaller number of practices). For the latter, it is however sufficient to demonstrate that incentives through the CRCF create more sustainability co-benefits while the type of practice can be the same. These multi-layered exceptions create an enabling environment for adverse selection in the type of activities that will apply for registration under the CRCF. Not having to conduct a financial viability test provides a competitive advantage for activities that already receive public subsidies. This bears substantial risks that CRCF revenues replace public subsidies in already on-going activities instead of incentivising new activities. This will only result in additional climate action if these subsidies in turn are appropriated to additional activities that increase carbon removals in agricultural soils or reduce the emissions from such soils. If they are returned to state budgets and appropriated for other purposes, CRCF funding will not lead to any additional carbon farming activities on agricultural land.

Finally, the draft methodology requires that activities must not start before the time of submission of the activity plan to the certification scheme for the certification audit. This would be a very robust rule for ensuring that only those activities will receive CRCF funding that need its incentive effect (prior consideration). The methodology allows however an exemption for any activities that started between 1 January 2023 and 31 December 2027. These "early movers" would be eligible to apply for certification under the CRCF until 2030. Considering that the CRCF regulation only entered into force on 26 December 2024, this exemption would allow registration of legacy actions that already successfully operated before the CRCF has been adopted.

Overall, the additionality rules should be revised and aligned with best practices of existing carbon crediting programmes.

- No attribution of units incentivised by public funding: The eligible mitigation activities
 may also be funded through public funding. If mitigation activities receive both public subsidies and CRCF units, this could artificially lower CRCF unit prices and implicitly subsidise continued fossil fuel use by the buyers of the units. The methodology should either
 exclude mitigation activities that receive public funding or proportionally attribute the emission reductions to the financial support provided.
- References to "onboarding" of existing certification schemes should be deleted from the methodology: In its additionality provisions, the methodology stipulates that activities carried out under other certification schemes than the CRCF automatically meet the prior consideration requirements discussed in the above bullet. However, only units issued after an official recognition of that scheme by the Commission will be eligible for certification. We recommend deleting these provisions from the methodology. There should be a separate delegated act, which will outline the detailed rules for transferring an activity from another certification scheme to the CRCF. These rules should be the same for all project types and there is no need to have such rules included in a methodology for an individual project type. Further, assuming that these activities automatically meet the prior consideration (or incentive effect) provisions of the methodology might be misguided. If the other certification scheme did not require operators to demonstrate that they meet these requirements, this might not be the case.

 Provisions on storage, monitoring and liability (section 4) are underdeveloped and miss critical provisions:

The CRCF Regulation defines that carbon farming sequestration units are temporary and expire at the end of the monitoring period of the relevant activity. However, there are no provisions on the consequences of the expiry of units that were already used. Provisions are needed to clarify that buyers bear the responsibility for replacing temporary units upon their expiry. If the temporary units had been used by a buyer before their expiry, after the expiry the carbon removals associated with these units may not be stored in soils or biomass anymore. This would undermine the environmental integrity of the CRCF because it would lead to higher levels of emissions in the atmosphere than without the use of the mechanism. Alternatively, the methodology should clarify for which limited purposes temporary units may be used, excluding meeting emission reduction obligations by public and private actors.

Carbon removals and reduced CO₂ emissions achieved through carbon farming activities on mineral soils are of temporary nature and can be reversed quickly. As a consequence, the activities need to be continuously maintained in order to ensure a longerterm mitigation benefit. Yet, the amount of additional removals that can be generated through maintaining an activity that increases carbon removals in soils beyond the proposed activity period is limited as soils reach a level of saturation at some point at which they can no longer store additional carbon. **Incentives to maintain carbon farming activities that enhance carbon removals or reduce emissions from soils and extend the monitoring period as required by recital 13 of the CRCF Regulation are missing in the draft methodology. Under the CDM, temporary certificates expired after a certain time period. Yet, they could be renewed and upon renewal, credits were issued** for the cumulative mitigation impact achieved in previous crediting periods. This would be one option to account for efforts to maintain achieved carbon removals that would otherwise be reversed by continuing an eligible agricultural activity. If such an approach was followed, a maximum time period for renewing the certification period would need to be defined.

Furthermore, it is not specified for soil emission reduction units whether they are considered permanent or temporary. Avoided CO_2 emissions from mineral soils are associated with non-permanence risks and can be reversed. For avoided CO_2 emissions appropriate liability mechanisms are missing and must be added. Such non-permanent emission reductions should be treated separately from avoided N_2O emissions from changing fertilising practices and nitrogen management. In contrast to avoided CO_2 emissions, avoided N_2O may be considered to be permanent as they are not related to a GHG reservoir and do not result in increased storage of these gases so that achieved emission reductions are not reversible.

Also, the consequences of no submission of monitoring reports during the monitoring period should be defined in the methodology.

Furthermore, **clarification is needed regarding the provisions on risk assessment** (section 4.1). Provisions should be added to exclude activities from eligibility for which the assessed risk of reversal is very high. Also, the proposed risk assessment does not include an assessment of avoidable risks which should be added. Additionally, operators should be required to undertake measures to mitigate the risk of reversals.

Regarding the implementation of liability (section 4.2), **provisions are missing on how operators will be held liable for replenishing the buffer pool in case of avoidable reversals** (e.g. that no further units will be issued to an operator before the buffer pool has been replenished and that units issued will be cancelled if such replenishment is not implemented).

 It remains unclear how fulfilment with sustainability requirements (section 5) will be ensured: Provisions are lacking on how compliance with safeguard criteria should be ensured and how monitoring of environmental impacts should be implemented. There is no systematic definition of specific sustainability aspects that need to be considered. In addition the methodology lacks a systematic approach to environmental and social safeguards, which would require operators to *identify* potential negative impacts of their activities, make subsequent adjustments to their activities to avoid these impacts and adopt environmental and social management plans aiming to *minimise and mitigate* impacts for cases where they cannot be fully avoided. It is unclear how the broad requirements that are listed will be operationalised as there is no standardised process prescribed for monitoring environmental impacts (i.e. an environmental and social impact assessment or similar) nor specific indicators (e.g. for soil biodiversity) to be used. Neither does the methodology include any definition of a process for action to be taken if negative impacts are identified. According to the draft methodology, the activity plan must include a description of how the activity is aligned with the minimum sustainability requirements and delivers the mandatory co-benefits for the protection and restoration of biodiversity and ecosystems defined in the draft methodology (section 6.1), but this is not further specified. The reference to other EU legislation with relevance for sustainability aspects is also too vague as e.g. the Habitat or Birds Directive have been developed for different purposes and it is not clear how compliance with the requirements therein shall be demonstrated for activities certified under the EU CRCF.

- We recommend shorter activity periods than currently proposed in the draft methodology (section 1.2). Additionally, we recommend adding requirements to update the baseline upon renewing an activity period where this is appropriate. That way, changes in carbon stocks due to weather conditions or other natural processes and new scientific findings related to assumptions on carbon stocks and quantification approaches can be accounted for. Corresponding provisions on renewing the activity period are currently missing.
- We welcome the replacement of standardised baselines by activity-specific baselines in the draft methodology. Yet, the reference period for determining activityspecific baselines should be longer than three years. According to the draft methodology, the length of the reference period to determine activity-specific baselines shall not be smaller than three years and may be extended where applicable to the length of the relevant land management cycle (section 2.3 and 2.5). This requirement is too vague as the reference period must be longer if the relevant land management cycle is longer than three years. Yet, also in other cases, the reference period should be longer than three years. Firstly, longer reference periods better reflect variation in carbon stocks and nitrogen availability due to climate change impacts and weather conditions. Additionally, longer reference periods better reflect past agricultural practices and prevent incentives to start an activity period at a point in time at which carbon stocks are particularly low. We also recommend making the monitoring of control sites mandatory under a measureremeasure approach for quantifying changes in soil organic carbon instead of using a baseline equal to zero (section 2.3). This is important to account for uncertainties and variation in climate stocks due to climate change impacts and weather conditions. Additionally, data gained via monitoring of control sites can be used to improve GHG inventory reporting over time.
- Phasing out the use of peat or peat containing products: The draft methodology excludes activities from certification if it applies peat or peat containing products as additional carbon input to the soil. Yet, it provides an exception in the case of peat included in compost or growing media for agroforestry seedlings (section 1.1). While products for commercial horticulture may currently contain peat by default, the exemptions will need to be phased out as peat-free products become available. Such a provision should be included in the methodology.
- Scope of associated GHG emissions expanded, but no systematic assessment required: We welcome that the scope of associated GHG emissions to be considered has been expanded to include upstream emissions (section 2.6). However, instead of an exhaustive list of emissions to be considered, the methodology should require a systematic assessment based on life cycle emissions data to account for the full amount of emissions associated with the activity, including upstream emissions. Emission sources and sinks should be included unless their omission is conservative.
- **Nitrification inhibitors:** Using nitrification inhibitors as an eligible activity under the draft methodology could have negative effects on water quality and soil biodiversity and further research on their impacts is required, particularly if applied at large scale. Given the involved risks, the use of nitrification inhibitors is unlikely to comply with the sustainability requirements of the CRCF Regulation. The use of nitrification inhibitors should thus only be eligible for certification if comprehensive environmental impact assessments are available at national level.

• For activities that use biochar as an organic soil improver, it must be clarified that strict sustainability criteria for biochar need to be applied (see comments on the draft methodology for biochar).

Öko-Institut e.V | Freiburg | Darmstadt | Berlin

The Oeko-Institut is one of Europe's leading independent research and consultancy organisations working for a sustainable future. Since its establishment in 1977, it has been laying the groundwork and devising strategies to realise the vision of sustainable development at global, national and local level. The Oeko-Institut has offices in Freiburg, Darmstadt and Berlin. www.oeko.de | info@oeko.de

Contact

Anne Siemons | <u>a.siemons@oeko.de</u> Lambert Schneider | <u>I.schneider@oeko.de</u>

This assessment was commissioned by Carbon Market Watch. It represents the views of the authors only and not necessarily the views of Carbon Market Watch.