

Overview of the Carbon Removals and Carbon Farming Certification process

In December 2024, the EU launched its certification framework for permanent carbon removals, carbon farming and carbon storage in products, commonly known as the Carbon Removals and Carbon Farming (CRCF) certification [Framework](#).

As its name suggests, the CRCF aims to certify a variety of practices or processes, namely: permanent carbon removals, carbon farming, and carbon storage in products. Each practice involves specific activities for which tailored methodologies are currently being developed. The methodologies will be published as [Delegated Acts](#), taking on the force of law. Note that the Regulation only offers guidance on the basic rules for developing the methodologies (Articles 4 till 8) and the elements they should contain (Annex I).

Overall, the activities involve:

1. **Permanent removals:** direct air capture and storage (DACCS), biomass with carbon capture and storage (BioCCS) and biochar. Biochar is currently classified as a permanent removal activity - yet uncertainty persists on its storage length. Therefore, a key aspect of the methodology is determining how much of a given biochar batch will be stored for at least several centuries.
2. **Carbon farming emissions reductions**, namely via peatland restoration through rewetting and, in the near future, reduced fertiliser use.
3. **Carbon farming sequestration**, specifically the planting of trees on unused and severely degraded land, soil carbon sequestration in mineral (or agricultural) soils and agro-forestry.
4. **Carbon storage in products**, mainly wooden construction elements.

Note that the list of activities is likely to expand.

As established in Articles 4 to 7 of the CRCF, the methodologies will follow the so-called Q.U.A.L.I.T.Y criteria. These are the quantification of climate impacts (against a baseline), the additionality of the activity, its long-term storage and liability for early release into the atmosphere, and sustainability. The methodologies should set out robust conditions, tests and safeguards that eligible activities need to comply with to be certified under the scheme. However, as a voluntary framework, the decision on whether to participate in the scheme or not rests with the operators and certification schemes.

While the European Commission and its consultants are developing the methodologies, these are also being discussed within the EU Carbon Removals Expert Group ([CREG](#)) of which CMW is a member. Note that, in addition to CREG meetings, numerous online workshops, discussing particular sections of (at times specific) methodologies, e.g. quantification in forestry, are held throughout the year.

Unfortunately, the CREG is largely dominated by industry lobbyists, which skews the balance during discussions and diminishes vital voices from independent experts, researchers, and civil society. As an active member of the CREG and the CRCF process in general, CMW has sought to rectify this imbalance by hiring its own consultants to thoroughly review the methodologies and flag pertinent issues. This document sets out the feedback received for the peatlands methodology by Öko-Institut. By sharing this information, we hope to contribute to the debate and shed further light on the numerous issues affecting the methodologies

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Assessment of the draft technical specifications for certification under the EU CRCF

Peatland rewetting

// Felix Fallasch and Lambert Schneider

Summary of key findings and recommendations

This document provides an assessment of the draft elements for an EU certification methodology on carbon farming under the CRCF regulation for the activity type peatland restoration through rewetting, published in October 2024.

Overall, the draft elements are still incomplete and currently do not meet all requirements for a technical quantification methodology. The document in some cases uses non-technical language that is more of a descriptive nature and does not provide clear guidance for practitioners on how to design projects that robustly quantify emission reduction impacts of the carbon farming activity.

Without further improvements, a methodology based on these elements would likely fall short of the core carbon principles (CCPs) agreed by the Integrity Council for the Voluntary Carbon Market (ICVCM) and would in some elements undermine best-practices applied by existing carbon crediting programmes on the voluntary carbon markets. It is recommended that in further developing the methodology to align its structure more closely to best-practices on international carbon markets, including the application of long-established concepts and terms. Key issues identified include:

- **Open-ended definition of eligible activities introduces uncertainty and risks for overestimation of emissions reductions and removals:** The open formulation in defining eligible activities (“may include”, “but not limited to”) makes it potentially difficult to attribute emission reductions to implemented activities. This introduces uncertainty to the quantification approach and poses large risks for overestimation of emission reductions or removals. Establishing a clear definition for the scope of the methodologies, for its

applicability conditions, and a list of eligible activities is best practice in other carbon crediting programs and an essential element for ensuring that the quantification approach is robust for the activities using the methodologies.

- **Overly long activity periods make baseline setting vulnerable for unintended inflation of emission impacts:** The draft element paper proposes to set the length of the minimum activity period (which presumably is also the crediting period) to 20 years, while there is no ceiling on its maximum length. This misses the point of crediting periods in certification schemes, which function as a safeguard for ensuring that assumptions and parameters in the baseline are periodically adjusted to reflect new economic and scientific developments. It is therefore recommended to set the length of the activity period to 5 years while operators may apply for multiple renewals during which the validity of the original baseline must be demonstrated. This avoids that units are issued on baselines calculated with parameters and assumptions that have lost their validity potentially several decades ago. The fact that the draft elements propose that peatland rewetting should be exempted from the general CRCF requirement that baselines must be updated at the beginning of each activity period further exacerbates this issue.
- **Loophole in the regulatory surplus test would potentially allow continued issuing of certified units for decades, even when activities become mandated by new laws adopted during project implementation:** Under the proposed regulatory test, projects are allowed to receive units until the end of their activity period even if countries introduce new legal requirements that mandate the project activity. Given that under the methodology activity periods can be several decades long, this introduces a risk that substantial volumes of non-additional units are certified. These provisions should therefore be replaced with language that requires periodic reassessment of regulatory surplus and termination of activity periods when projects cease to pass the regulatory surplus test. In the voluntary carbon market, the best practice is to assess legal requirements at each issuance and only allow for issuing units until relevant laws or regulations enter into force, in particular for developed countries.
- **Not fit-for-purpose definition of financial additionality might open the door for certifying projects that are financially viable without CRCF units:** The current elements of the proposed financial additionality test are not yet fit-for-purpose. As this methodology uses an activity-specific baseline, financial additionality must be assessed on the activity level. This would not be the case under the current elements, which make incoherent statements about whether existing certification schemes should be considered additional under the CRCF and claim that certification schemes funded by the private sector would be automatically additional. However, additionality does not relate to certification schemes but mitigation activities. Under the current provisions, individual projects would not need to demonstrate that they need revenues from certified units to be financially attractive, which would be inconsistent with best-practice for ensuring integrity of projects with activity-specific baselines. The current elements should therefore be replaced with provisions requiring the application of a financial additionality test using benchmark or investment comparison analysis.
- **No consideration of 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 removals or emission reductions to the financial support provided (see our [cross-cutting findings](#)).

- **Potential flexibility to choose between different models, methods and approaches is not a robust approach to quantification:** The draft elements paper proposes that the draft methodology will not prescribe specific models and approaches but criteria for protocols and models to become eligible for certification. Experience from improved forest management and avoided deforestation projects in the voluntary carbon markets have shown that such flexibility 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. The quantification approach should therefore be specified in the methodology.
- **No consideration of indirect land-use change:** The methodology will not include a requirement to quantify emissions associated with indirect land use change at the operator level. This is not appropriate and does not reflect best practice established under the CDM, the Article 6.4 mechanism and the ICVCM. It could lead to large overestimation of the emission reductions.
- **Unsubstantiated permanence assumptions:** The elements paper states that avoided emissions from peatland rewetting would be permanent without further substantiating this claim. However, the emission reductions that are avoided through the rewetting of peatlands have a non-permanence risk. If at a later stage the areas would be re-drained again, then the emissions would continue until all peat is decomposed and the carbon is emitted to the atmosphere. Cumulatively over time, the same amount of carbon would have been emitted to the atmosphere as in the baseline scenario. The methodology should therefore include mandatory requirements for avoiding or reducing non-permanence risks as well as for accounting and compensation of reversals. Methodologies of existing peatland rewetting certification schemes such as the UK peatland code, VCS methodology VM00036 or the German based MoorFutures all include such elements, and any EU-wide quantification methodology should not fall behind existing standards.
- **Underdeveloped monitoring requirements:** The draft elements still lack standard requirements on monitoring, including a list of parameters that must be monitored by operators, specific requirements on the data to be used, the unit they need to be reported in, as well as eligible data sources and frequency of monitoring.
- **Sustainability minimum requirements not yet fully adequate to safeguard socially and environmentally sound project implementation:** The current draft elements make references to the EU taxonomy and the do no significant harm principle. They however lack clear guidelines how projects must be designed to do no harm. Peatland rewetting is associated with potential negative environmental and social impacts, including through changes in land-use. The methodology should therefore contain a prescriptive list of environmental goods (e.g., health, air, water, soil etc.) and social achievements for which operators must assess whether they would be negatively impacted by the project activity. It should further set out normative values that specify to what level impacts would still be considered as acceptable. For example, it would not be sufficient to set out a requirement to “minimize” the use of pesticides. The methodology should prescribe a maximum threshold on pesticide application for which project activities still can be considered as not harming the soil.

Detailed comments

Definitions

The methodology does not contain definitions for key terms including greenhouse gases, carbon dioxide equivalence and global warming potential used to determine carbon dioxide equivalence. These definitions should be added (see our [cross-cutting findings](#)).

Introduction/Context

The methodology contains an introduction section, which provides anecdotal arguments why peatland rewetting should be a priority under the CRCF outlining its potential benefits for the climate and sustainable development. This section is non-technical, and not relevant for the purpose of the methodology. It should therefore be removed.

Scope

Section 1.1 – Eligible activities

The methodology stipulates that “*eligible practices may include, but are not limited to:*

- *blocking (damming), removal, or backfilling (i.e., the completely filling) of drainage structures (ditches, canals, etc.)*
- *removal or curbing of pumps*
- *reestablishment of peat-forming vegetation*
- *paludiculture, provided that improve the peatland both in terms of climate change mitigation and of peatland typical biodiversity.”*

There are two issues with this section:

1. The methodology should use consistent terminology. The term “practices” should therefore be replaced with “activities” as it is used in the heading for this sub-section.
2. The open-ended framing of eligible “practices” under the methodology (using “may” and “but not limited to”) is problematic because it introduces uncertainty around the activities that projects will implement. This may potentially result in a situation in which the calculated emission reductions may not be caused by the mitigation activities, reducing the robustness of the methodology.

The current provision should therefore be replaced with a prescriptive sentence such as:

This methodology applies to activities that rewet drained organic soils in peatlands that include:

- *blocking (damming), removal, or backfilling (i.e., the completely filling) of drainage structures (ditches, canals, etc.);*
- *removal or curbing of pumps;*
- *reestablishment of peat-forming vegetation; and*
- *paludiculture, provided that this improves the peatland both in terms of climate change mitigation and of peatland typical biodiversity.*

Any concerns that a prescriptive framing of eligible activities risks unduly excluding not specified activities with potentially high emission reduction impacts can be remedied by either adding further activities to the list or including a review clause that allows amendments of the methodology at periodic intervals.

Activity period

The methodology uses a rather complicated approach to determine the length of the activity period:

The length of the activity period is coupled to the peat depletion time in the baseline. The intention behind this is presumably to account for the fact that peatlands only emit greenhouse gases while a minimum depth of peat remains.

The methodology illustrates this approach by an example: If a peatland has 60cm of peat remaining and deteriorates at a rate of 1cm per annum, the peat would be completely exhausted in 60 years. Consequently, the methodology argues that the maximum allowable activity period for this case would be 60 years.

The main purpose of the “activity period” (noting that the commonly accepted term that most carbon crediting mechanisms use is “crediting period”) in certification mechanisms is to limit issuance of certificates to a period for which it can be realistically assumed that assumptions and parameters used for calculating the baseline and project scenario will not undergo significant changes. The length of the activity period is therefore an important lever for ensuring conservativeness of any quantification methodology.

Current provisions in the methodology stipulate that the minimum length of the activity period is 20 years without putting a ceiling on its maximum length. This means that depending on the height of remaining peat at the start of the baseline, an activity period could stretch over several decades.

The methodology further proposes that peatland rewetting activities should be exempted from the general CRCF requirement that activity-specific baselines should be periodically updated by the operator at the beginning of each activity period. This would mean that baselines used to calculate the emission impact of a project could theoretically be in place and valid for several hundred years as the methodology also sets no limit to the number of times that activity periods can be renewed.

In sum, the current provisions result in high uncertainty regarding the calculation of emission reductions and could potentially lead to significant over-crediting. It is plausible that baseline assumptions will not be valid for such a long time, especially as the

methodology proposes to use default values for peat depletion rates (1 cm per annum in bogs and 1.5 cm per annum in fens), which might be subject to change due to further development of peatland science or better availability of field data.

It is therefore proposed to replace the current provisions with the following text:

The initial activity period shall be five years following the project start date. Operators shall be eligible to apply for multiple renewals of activity periods, which shall equally be five years, provided that the carbon farming activity meets the eligibility requirements of the most current version of this methodology at the time of each application. Application for eligibility under a renewed activity period shall be submitted no later than six months before the end date of the previous activity period. Where an application is not submitted within this timeline, the activity period shall end, and the project shall be ineligible for further crediting.

At each renewal of the activity-period, the validity of the original baseline shall be demonstrated, or where invalid, a new baseline scenario shall be determined when renewing the crediting period.

The activity period may only be renewed if it is reasonable to assume, based on conservative assumptions for the context of the project, that there would still be sufficient peat layer to cause emissions in the baseline scenario throughout the renewed activity period.

Quantification

The methodology uses an activity-specific baseline as there are no detailed EU-wide data on the variety and existing conditions of peatlands that would be required for calculating a standardized-baseline. Issues identified with the proposed quantification approach include the following:

Lack of a coherent and streamlined structure: The methodology could benefit from a more coherent structure with clear headings and sub-headings. Some elements such as requirements on monitoring and quantification are currently a bit scattered through different sections making it difficult for practitioners to follow.

Consideration of uncertainties: The methodology requires that uncertainties in the calculation of the EFs shall be estimated and the level of uncertainty shall be added to the estimation of the emissions in the baseline in order to ensure a conservative quantification. The uncertainty estimates must follow methods contained in the 2006 IPCC Guidelines, Vol.1 chapter 3, or any further refinements. We note that the uncertainty should not be added but subtracted from baseline emissions, as otherwise emission reductions would be overestimated.

Materiality thresholds: The methodology defines a materiality threshold: any emission source within the activity boundaries shall be considered material where it is associated with emissions over the course of the activity period equal to or greater than [2%] of the expected gross carbon removals delivered over that activity period.

- The proposed materiality threshold is inconsistent with the principle of conservative quantification. The methodology should be revised to include all emission

sources or sinks, except where the exclusion is conservative (see our [cross-cutting findings](#) for more details). The use of the materiality threshold is not appropriate

- Moreover, it is confusing that the methodology mentions removals, while the project type is defined as avoided emissions from peatland rewetting.

Potential flexibility to choose between different models, methods and approaches is not a robust approach to quantification: The draft elements paper proposes that the draft methodology will not prescribe specific models and approaches but criteria for protocols and models to become eligible for certification. Experience from improved forest management and avoided deforestation projects in the voluntary carbon markets have shown that such flexibility 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 ((Probst et al. forthcoming; Haya et al. 2023a; Haya et al. 2023b; Badgley et al. 2022). The quantification approach should therefore be specified in the methodology.

No consideration of indirect land-use change: The methodology will not include a requirement to quantify emissions associated with indirect land use change at the operator level. This is not appropriate and could lead to large overestimation of the emission reductions. If the land is currently used for agriculture, the agricultural services (e.g. grazing) or products (e.g. crops) would need to be produced elsewhere. This could induce high emissions, potentially even causing deforestation in other countries. It is best practice in carbon crediting programmes to consider indirect land-use. CDM methodologies and a recent standard adopted by the Article 6.4 Supervisory Body explicitly require accounting for or avoiding such emissions. Similarly, the ICVCM requires that all potential leakage sources be considered. The methodology claims that no methods exist to estimate such effects. This is not accurate. Both in the literature and in other carbon crediting programmes, provisions have been established to avoid or estimate such emissions.

Section 3: Additionality

Robust approaches for demonstrating additionality of removal or carbon farming activities for activity-specific baselines should consist of a three-pronged approach that restricts eligibility of activities to those for which project proponents can demonstrate that they:

1. Are not obligated to implement them due to legal requirements in the country where the project is proposed to take place (often referred to as “regulatory surplus test” or “legal additionality test”);
2. Have considered revenues from selling removal or carbon farming certificates at the time when making their investment decision (often referred to as “prior consideration”); and
3. Either
 - Need additional revenues from selling removal or carbon farming certificates for making activities profitable and/or for mobilizing funders that are willing to invest in them (often referred to as “financial additionality test”

or “investment analysis” or “benchmark analysis” or “financial attractiveness”).

OR

- Face non-financial barriers that can be overcome through removal or carbon farming certificates (often referred to as “barrier analysis”)

In its current form, the proposed provisions for the demonstration of additionality result in a high risk that non-additional carbon farming activities would be eligible for certification under the methodology. The following paragraphs outline the risks for each component of the additionality section.

Regulatory test (section 3.1)

Robust “Regulatory surplus” tests usually consist of two parts:

1. Provisions that exclude activities that are implemented due to legal requirements in the country or region in which the project is being implemented.
2. Provisions that regulate (dis-)continuation of unit issuance in case new legal requirements enter into force that would lead to the implementation of the activity after the start of project implementation.

The methodology’s provisions addressing the **first part** of the regulatory test **can be considered as robust and in line with best practice on voluntary carbon markets**. They stipulate that there shall be no legal obligation on the operator stemming from Union or national legislation, to carry out the carbon farming activity in the project area. Legal obligations are further clearly defined by stating that these encompass laws, statutes, regulations, court orders, environmental management agreements, planning decisions or other legally binding agreements.

The provisions addressing the **second part** of the regulatory test **are however problematic and have the potential to undermine the additionality of units issued under the methodology**. They stipulate that if new legal requirements are introduced during the activity period, carbon farming activities remain eligible for unit generation until the end of the activity period. This is problematic, because the methodology stipulates that the minimum length of the activity period must be 20 years (with exceptions) while there is no ceiling to its maximum length. This means that if new legislation is adopted that mandates operators to implement the carbon farming activity e.g. in year five of the project, operators, depending on the length of the activity period, could receive credits for several decades during which the activity should not be considered additional anymore.

This provision constitutes a potential risk for issuing large volumes of non-additional units and should therefore be changed.

The provisions in its current form further undermine best practices on voluntary carbon markets. The ICVCM, for example, recommends reassessing legal surplus of activities at every verification in case the crediting period is longer than five years.¹

¹ See Criterion 8.2 „Existing Host Country Legal Requirements” of the IC-VCM Assessment Framework, Version 1.1 <https://icvcm.org/wp-content/uploads/2024/02/CCP-Book-V1.1-FINAL-LowRes-15May24.pdf>

Such an approach is also common practice by many carbon crediting programs on the voluntary carbon markets.

It is therefore recommended to amend the provision by deleting the following paragraph:

In order not to discourage Member States from introducing mandatory national obligations that are more stringent or ambitious compared to Union or national obligations in force at the time where the activity starts, an activity may still be considered additional where such national obligations are introduced during the activity period. Such activity can still generate units eligible for certification up to the end of the activity period.

and replacing it by the following:

“Operators must demonstrate at each re-certification audit that the carbon farming activity passes the regulatory test. If operators at any re-certification audit fail to demonstrate that the carbon farming activity still passes the regulatory test, the activity period for the activity will be terminated.”

The effectiveness of the proposed addition is contingent on the length of the re-certification audit. Currently the methodology stipulates that the first re-certification audit should take place after four years and annually thereafter. An annual interval would be sufficient to avoid the issuance of large volumes of non-additional units. It would therefore be important to keep the annual interval in the final methodology.

Prior consideration (missing from the methodology)

Only new mitigation activities should be eligible: The methodology does not include any provisions that prevent rewarding past climate action. The methodology should include provisions to ensure that mitigation activities are only eligible if they are newly implemented and if they have considered the incentives from CRCF units when deciding to proceed with the implementation of the mitigation activities (see our textual proposal in our [cross-cutting findings](#)).

Section 3.2 – Financial additionality

The current provisions in section 3.2 are unclear and are not fit-for-purpose for a robust financial additionality test. In carbon crediting mechanisms, the objective of financial additionality tests is to assess whether the proposed mitigation activity would not be financially viable without the revenues from carbon credits.

An overarching issue with the provisions is that they confuse the question of additionality of mitigation activities with the question of whether existing certification schemes should be eligible for recognition under the CRCF. As the proposed methodology is conceptualised using an activity-specific baseline (in contrast to a standardized baseline), the financial additionality assessment must deal with the financial additionality of the proposed activities. Considerations of eligibility of existing certification schemes under the CRCF should be dealt with elsewhere.

Further, the provisions make conceptually inaccurate assumptions, including the following:

- They stipulate that if existing certification schemes are financed through remuneration from the private sector, they are automatically additional because the activity would not take place without the certification scheme. The fact that private entities purchase carbon credits or CRCF units however does not allow making any statement on the likelihood of additionality of a mitigation activity.
- They stipulate that if schemes are financed through a combination of public and private funding, this is appropriate as long there is no overcompensation of the emission reduction certificates. Therefore project operators must include information on any form of financing received or applied for with regard to the activity in the certificate of compliance. Cumulation rules under the State aid legal framework would apply accordingly. However, placing a ceiling on the amount of support an activity can receive, is not a robust approach for ensuring financial additionality of mitigation or removal activities.

The proposed methodological approach does not assess whether mitigation activities are additional. It is inconsistent with the approaches required by the ICVCM, and any of the larger carbon crediting programmes (CDM, Article 6.4, VCS, Gold Standard, ACR, Climate Action Reserve). The approach would likely lead to the certification of mostly non-additional mitigation activities.

It is therefore proposed to replace the complete section 3.2 with the following provisions:

“Operators shall demonstrate that the carbon farming activity would not have taken place without the added incentive of the certification scheme by performing an investment analysis for the proposed activity.

Operators should transparently document the investment analysis as part of the documentation submitted for registration. Such documentation shall include information and evidence that substantiate and justify the assumptions, data and conclusions made and used for the investment analysis. All information and evidence provided shall be consistent with information presented to the operator’s decision-making management and investors/lenders.

For performing the investment analysis, the operator shall apply a suitable financial indicator such as the net present value (NPV) or internal rate of return (IRR). For calculating the financial indicator the operator shall consider all relevant costs (CAPEX, OPEX) and revenues, including all form of subsidies and support schemes for the carbon farming activity.

All parameters and assumptions used in the investment analysis shall be internally consistent (e.g. cash flows shall be consistently expressed either in real or nominal terms).

Operators shall apply the investment analysis to perform one of the following approaches to demonstrate additionality:

Benchmark analysis

Under the benchmark analysis operators shall compare the financial indicators of the carbon farming activity against a benchmark that is appropriate for the financial indicator used (e.g. when applying equity IRR the benchmark shall

be the cost of equity and when applying project IRR the benchmark shall be the weighted average cost of capital).

Additionality is demonstrated if the analysis shows that:

- i. The carbon farming activity would not meet the required financial benchmark without revenues from CRCF units;*
- ii. The financial performance of the carbon farming activity increases decisively through revenues from CRCF units; and*
- iii. Revenues from CRCF units raise the financial performance at or above the required financial benchmark.*

Investment comparison analysis

Under the investment comparison analysis, operators shall compare the carbon farming activity to alternative scenarios that are mutually exclusive and provide the same type of products or service as the carbon farming activity.

Additionality is demonstrated if the analysis shows that the mitigation activity would not be the financially most attractive scenario in absence of revenues from selling CRCF units.

Regardless the approach chosen to demonstrate additionality (benchmark analysis; investment comparison analysis), operators shall, as part of their investment analysis, conduct a sensitivity analysis to show whether the conclusion regarding the financial attractiveness is robust to reasonable variation in the critical assumptions.

All elements of the investment analysis shall be assessed as part of the validation by a certification body and checked by the certification scheme.

No consideration of public funding: The financial additionality provisions recognize that peatland rewetting activities might already receive funding through public support schemes, e.g., through the Common Agricultural Policy. 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 removals or emission reductions to the financial support provided (see our [cross-cutting findings](#)).

Section 4: Storage, monitoring and liability

This section is currently underdeveloped and misses critical provisions that are standard practice in voluntary carbon markets. It further contains elements such as provisions on avoiding leakage that should be covered in the quantification section. Conceptually, the most problematic issue is that the methodology assumes that peatland rewetting does not involve any non-permanence risks.

Non-permanence assumptions

The methodology offers a somewhat tautological explanation why peatland rewetting is not associated with any non-permanence risks, as follows:

The present methodology accounts for permanent emission reductions, i.e. emissions that are never released to the atmosphere and therefore result in permanent soil emission reduction units. The risk of reversals is not applicable in this context, and therefore there is no need to address it.

This statement is later contradicted by the following sentence that suggests that there indeed are reversal risks for the carbon farming activity because it stores carbon in the ground.

Where a release of the carbon stored occurs as a result of the operator's intentional activity such as through drainage of the project area, no new emission reduction units can be certified for a peatland restoration activity by the same operator on that project area.

The emission reductions that are avoided through the rewetting of peatlands have a non-permanence risk. If at a later stage the areas would be re-drained again, then the emissions would continue until all peat is decomposed and the carbon is emitted to the atmosphere. Cumulatively over time, the same amount of carbon would have been emitted to the atmosphere as in the baseline scenario. Different from fossil fuels, the reservoir of peat is rather limited, and therefore involves a non-permanence risk. For a detailed discussion, a new paper by FAO discusses in detail the factors underpinning non-permanence risks (FAO 2024). This paper classifies peatlands also having non-permanence risks. We note, however, that the size of the risk may be lower than for forestry activities, as it may be less likely that areas, once they have been rewetted, would be drained again. By contrast, for forests both human and natural reversal risks may be larger.

Methodologies of existing peatland rewetting certification schemes such as the UK peatland code, VCS methodology VM00036 or the German based MoorFutures all include elements on non-permanence, and any EU-wide quantification methodology should not fall behind existing standards. Further, the ICVCM defines peatland rewetting as an activity for which non-permanence should be addressed through monitoring and compensation for reversals.

Scientists arguing that peatland rewetting is not associated with non-permanence risks, claim that even if operators would stop rewetting, and peats restart emitting GHG emissions they would never emit the same levels of emissions as would have happened in the baseline. However this might only hold if looking at a fixed time horizon. As the science is unclear and acknowledging that this is established practice by existing certification schemes, as a matter of conservativeness, it is important to require projects to minimize non-permanence risks and address potential reversal risks through appropriate arrangements such as pooled buffer reserves.

Other elements missing in the section:

- A prescriptive list of parameters that must be monitored by operators, including prescriptive requirements on the data to be used, the unit they need to be reported in, eligible data sources and frequency of monitoring
- A prescriptive description of the monitoring plan, including an outline of which sections must be included in such plan
- Prescriptive requirements on uncertainty and quality management

Some of these elements are mentioned in the quantification section. To streamline the methodology all provisions relating to monitoring should be included in this section.

Section 5: Sustainability

The sustainability is divided into two sections:

- Section 5.1: Protection and restoration of biodiversity and ecosystems including soil health, as well as avoidance of land degradation.
- Section 5.2 Climate change mitigation; climate change adaptation; sustainable use and protection of water and marine resources; transition to a circular economy, including the efficient use of sustainably sourced bio-based materials; pollution prevention and control.

For each section a sub-section is provided that provides rules on minimum sustainability and co-benefits requirements as well as their monitoring.

- Sub-section 5.1.1 titled “rules on the minimum sustainability requirements and co-benefits” is a mere reciting of potential positive effects of peatland rewetting without providing technical rules for project design that could safeguard that these effects are indeed achieved. It is recommended to rework this sub-section and structure it in a manner that provides technical guidance to project operators that is prescriptive and easy to understand.
- Sub-section 5.1.2 “rules on monitoring and reporting of the mandatory co-benefits” contains a requirement for operators to contribute to the targets of the Nature Restoration Regulation (NRR). However, it further specifies that these contributions will be achieved by implementing the activities listed under section 1.1. of the methodology on eligible activities. The only monitoring rules it sets out is that the implementation of the eligible activities shall be monitored.
- Sub-section 5.2.1 titled “rules on the minimum sustainability requirements” contains a statement that the minimum requirements will be identified based on the technical screening criteria for the “Do no significant harm” principle included in the taxonomy regulation (section 2.1. of Annex I to Regulation (EU) 2021/2139). It is however unclear whether the text should constitute a requirement for operators to perform this screening for their projects or whether the Commission will conduct this screening to derive a list of minimum requirements that will be included in the next version of the methodology.
- Sub-section 5.2.2 titled “rules on the monitoring and reporting of voluntary co-benefits” stipulates that activities are deemed to generate co-benefits when they comply with the technical screening criteria in Commission Delegated Regulation (EU) 2023/2486 on Nature-based solutions for flood and drought risk prevention and protection. It further provides some examples where activities implemented under the methodology could create co-benefits on other sustainability objectives. It however mentions the reduction of methane emissions from peatland rewetting as a potential co-benefit. Rewetting however will likely result in an increase of methane emissions if not properly safeguarded

and it would therefore be appropriate for the methodology to prescribe project design choices such as e.g. removal of fresh biomass before rewetting to minimize such emissions.

Overall, this section would benefit from a more concise structure that:

- Clearly identifies and names minimum requirements and co-benefits that projects must meet and achieve.
- Provides prescriptive guidance on how projects must be designed to safeguard that activities indeed meet minimum requirements and generate co-benefits.
- Provides a prescriptive list of indicators that must be monitored by operators to ensure that projects indeed provide co-benefits.
- Provides the data sources that are eligible for reporting on the indicators.
- Contains provisions that prescribe actions operators have to take if projects fail to generate co-benefits.

Information to be included in the certificate of compliance

The definition of this information is missing in the draft methodology. The information to be included in certificates and publicly available background information should be provided (see the specific proposals in our [cross-cutting findings](#)).

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