ZEP's feedback on the draft Implementing Regulation laying down rules on certification schemes, certification bodies, and audits under the CRCF Regulation

The Zero Emissions Platform (ZEP) welcomes the opportunity to provide feedback on the draft implementing rules for the verification of carbon removals, carbon farming and carbon storage in products under Regulation (EU) 2024/3012 (thereafter "CRCF Regulation").

Our comments relate to the following articles and themes of the draft Implementing Regulation:

1) Governance structure (Article 4)
2) Change of certification scheme by operators or groups of operators (Article 8)
3) Publication of information by certification schemes and minimum content of their annual operation report (Article 9)
4) Audit process and levels of assurance (Article 10)
5) Auditing of carbon removal and soil emission calculations (Article 11)
6) Supervision of certification bodies by the Member States and the Commission (Article 15)
7) Certification registries (Article 16)
8) Recognition of certification schemes (Article 17)
9) System-level oversight

ZEP is a consortium of experts from research organisations, industry, and NGOs established in 2005 and partly funded by the European Commission through Horizon Europe. ZEP runs the European Technology and Innovation Platform (ETIP) for CCS and CCU technologies, and co-chairs the Implementation Working Group no. 9 on CCS and CCU together with the Dutch and Norwegian governments under the European Strategic Energy Technology Plan (SET Plan).

Our mission is to accelerate the deployment of CCS/U technologies and the buildout of CO_2 infrastructure to reduce CO_2 emissions and help Europe meet its climate neutrality target by 2050. Our technical reports and policy recommendations build on the expertise and experiences of ZEP's members and wider network, which range from energy producers and industrial companies to infrastructure developers, technology and equipment providers, financial organisations, academic institutions, research centres, environmental NGOs, trade unions, and civil society organisations.

Governance structure (Art. 4)

We welcome the objectives set out in Article 4. However, the language in Article 4.2 concerning the composition of a certification scheme's governance structure lacks sufficient clarity to ensure balanced stakeholder representation.

While it requires that *"no individual stakeholder or stakeholder group shall have a dominant role"* and that *"rules and procedures to avoid conflicts of interest in decision-making"* be set up, it is not entirely clear how such a "**dominant position**" would be detected, nor what the consequences would be if it were.

The fact that *"decisions on the design and operation of the scheme shall only be taken where a quorum of the majority of stakeholders is reached"* is a welcome addition. However, the absence of defined criteria for assessing dominance introduces ambiguity and weakens enforceability. This vagueness risks undermining the impartiality of the scheme, particularly if specific sectors are over-represented.

To mitigate these risks and improve clarity, we recommend that **decision-making quorums** require participation from at least three distinct "relevant stakeholder groups" (Article 4.2). In addition, we recommend that no single stakeholder group should hold more than 30-40% of voting rights or representation on the governance body (including within the "technical committee" mentioned in Article 4.1).

To remain consistent with the mandate that the European Commission received through Article 11.4 in the CRCF Regulation, we also suggest referring to Article 11.2 in the CRCF Regulation ("Operation of certification schemes"), which states that:

"Certification schemes shall operate in an independent manner on the basis of reliable and transparent rules and procedures, in particular with regard to internal management and monitoring, handling of complaints and appeals, stakeholder consultation, transparency and publication of information, appointment and training of certification bodies, addressing non-conformity issues, and development and management of certification registries. […] Certification schemes shall put in place easily accessible complaint and appeal procedures. Information about those procedures shall be made publicly available in the certification registry or, once established, in the Union registry."

Article 4 in this Implementing Regulation must follow these guidelines. Article 5.2 mentions that complaints can be lodged against operators or certification bodies, but since these complaints are to be handled by the certification scheme themselves, this appeal mechanism is not independent of the decision-making bodies involved in the contested decision. It thus seems unlikely that governance procedures can be called into question without any risk of conflicts of interest. Article 5.4 only mentions that: *"Where necessary, certification schemes shall take corrective measures on their governance structure or on their internal monitoring process."*

We thus believe that the European Commission should require certification schemes to adopt:

i) **mandatory conflict of interest declarations** for all board members and committee participants;
ii) **procedures for recusal** from decision-making where a material conflict arises; and
iii) **independent review panels** for disputes involving conflicts of interest.

To promote further transparency, certification schemes could be required to report annually on the **composition of governance bodies** by stakeholder category. Where a governance imbalance is detected, or where a stakeholder group exercises a dominant role contrary to these provisions, corrective actions should be taken – i.e. the scheme's recognition may be subject to review, suspension, or revocation.

This last point is in line with Article 13.3 in the CRCF Regulation ("Recognition of certification schemes"), which specifies that the European Commission may, after appropriate consultation with the certification scheme, *"repeal a decision recognising that scheme* […] *where the certification scheme fails to implement the rules set out in the implementing acts referred to in Article 11(5)."* We thus recommend highlighting this point too in **Article 4** of this Implementing Regulation.

Finally, some words seemed to be missing in the two paragraphs provided under this Article:

- *"… to provide advice* **to** *the scheme management on technical issues …"*
- *"… or a stakeholder group shall not* **play a** *dominant role in the decision-making process …"*

Change of certification scheme by operators or groups of operators (Art. 8)

As Recital 5 correctly notes: *"Operators have the possibility to participate in a different certification scheme at any time. However, rules are needed to prevent the risk of 'scheme hopping' whereby an operator who has failed an audit under one scheme immediately applies for certification under another scheme. Such rules should also apply to situations where the operator changed legal personality but remains the same in substance, so that minor or purely formal modifications, namely changes in the governance structure or the scope of activities, do not exempt the operator with a new identity from such rules."*

Article 8 partly addresses the risk of **"scheme hopping"** – the practice whereby operators exit a certification scheme, often following audit failures or non-conformities, and reapply under a different scheme to avoid scrutiny or sanctions. However, it does so in a limited and decentralised manner that may hinder effective enforcement.

While operators are required to disclose their past participation in other schemes and provide previous audit reports, the burden of assessing this history rests solely with individual certification schemes. This fragmented approach creates enforcement gaps, especially in the absence of a **centralised EU-wide database (or "blacklist")** of disqualified and non-compliant operators.

Similarly, Article 9(2) requires certification schemes to list on their registries "*those operators with a withdrawn certificate, terminated certificate or expired certificate, for at least 24 months after the date of withdrawal, termination or expiry of the certificate".* In addition, they shall *"make public without delay any changes in the certification status of operators."* While the second provision is welcome, the 2-year minimum requirement may not be sufficient to prevent recidivism.

We fear that without a unified mechanism for tracking and sharing such information, operators may evade scrutiny by moving between schemes or exploiting inconsistencies in implementation. Therefore, we recommend strengthening Article 8 with:

(i) a centralised registry of disqualified applicants; and
(ii) mandatory cross-scheme information exchange.

This would significantly enhance the robustness and integrity of the certification framework.

Finally, we recommend that the European Commission further develops the wording of the paragraphs under Article 8(2). The last paragraph related to point (c), in particular, mentions that an operator or group of operators can *"prove that it had a valid reason for withdrawing from another scheme before the first re-certification audit"*, but the text does not specify what type of factors can qualify as "valid reasons".

Publication of information by certification schemes and minimum content of their annual operation report (Art. 9)

Article 9 – coupled with Annex IV and Annex V – outlines the required content of annual operations reports by certification schemes. While the annexes include useful information on governance, knowledge sharing activities, internal monitoring, and complaints handling, they lack performance and outcome-based metrics.

For instance, there is no requirement to report on the actual **volume and characteristics of certified removals** – such as the total tonnes certified and CRCF/permanence classification. Additionally, there is no requirement to report on certification accuracy indicators, such as error rates, remediation timelines, or the recurrence of specific non-conformities.

We recommend that annual reports include this **quantitative information** in anonymised form, while still allowing **disaggregation by carbon removal activity type** to ensure traceability and comparability. In particular, we recommend that permanent carbon removals are not lumped together under a single category, but that the reports clearly show how much of the certified permanent removals corresponds to each methodology—such as BioCCS, DACCS, biochar, and any other permanent carbon removal methodologies that may be adopted by the European Commission in the future.

We also believe the certification schemes should provide public access to essential project data, including project descriptions, additionality assessments, carbon accounting methodologies, and third-party validation and verification reports. Commercially sensitive information should be protected, but most of the data we recommend disclosing can already be found in the individual certification and re-certification audit reports referred to in Article 3 and Annex III, therefore business interests are not further impacted.

Including such standardised metrics would enhance transparency, facilitate cross-scheme comparisons, and support continuous improvement in certification quality. This level of transparency would also provide valuable data for researchers and support evidence-based policymaking. This level of information will also greatly contribute to the system-level oversight that we recommend in the last chapter of this document.

Audit process and levels of assurance (Art. 10)

While Article 10 requires certification bodies to conduct certification and re-certification audits with "reasonable assurance", this may not provide the level of scrutiny needed to uphold the environmental and methodological integrity of carbon removal certification. "Reasonable assurance" represents a moderate level of confidence, typically involving selective checks and limited sampling, whereas **"high-assurance" audits** require more extensive data validation, rigorous testing of assumptions, and stronger evidentiary standards.

Given the technical complexity of carbon removal and soil emission reduction activities, a higher standard of audit assurance is necessary to ensure that claims are accurate, consistent, and verifiable over time. This is particularly important where certification outcomes may be used to inform public policy, climate targets, or investment decisions. Without more robust assurance, there is a greater risk of miscalculations or inconsistent application of methodologies – ultimately undermining the credibility and effectiveness of the certification system. Given that certified units may be used for corporate claims or traded on voluntary markets, the risk of over-crediting or misrepresentation is significant.

To mitigate this, we recommend that that Article 10.1 be amended as follows:

"… The audit shall ~~***as a minimum***~~ *provide* ~~***reasonable***~~ **high** *assurance of the conformity of the activity, including its activity plan and monitoring plan, with the requirements …"*

Similarly, we suggest amending Recital 7 in this draft Implementing Regulation as follows:

"To ensure a robust certification scheme, ~~***reasonable***~~ **high** *level of assurance should be required for the certification bodies to conclude that the activity is free from material errors and omissions of misstatements, following the verification of the data submitted by operators or groups of operators. Applications for certification of compliance should be thoroughly checked* ~~***on a reasonable assurance basis***~~ *before the activity can start. Re-certification audits should also be conducted at a reasonable assurance level."*

We note that certification, re-certification, and surveillance audits should be conducted in accordance with EN ISO/IEC 17065 (both mentioned in Article 10 and Article 13), including EN ISO/IEC 17029 and EN ISO/IEC 17021-2. At present, only a few Validation and Verification Bodies (VVBs) hold this specific accreditation. Making it mandatory could thus shrink the pool of eligible certification bodies, potentially creating bottlenecks in the certification process. While it is key that certification bodies comply with all the mandatory provisions included in this Implementing Regulation, we recommend that the EU Member States explore ways to support certification bodies that do not currently have EN ISO/IEC 17065 accreditation.

We also wish to stress the importance of providing comprehensive guidance on the administrative procedures required for existing projects that will transition to EU CRCF certification. To ensure that

the CRCF is both a robust and attractive framework that stimulates project deployment in Europe, the implementing rules for the certification schemes, bodies, audit process, and registries should seek to minimise administrative burden for operators and project developers.

For instance, as suggested in Recital 36 in the CRCF Regulation: *"… Until the establishment of the Union registry, certification schemes recognised by the Commission should establish and maintain interoperable certification registries. In order to ensure that there is transparency and full traceability in relation to certified units, and to avoid the risk of fraud and double counting, the certification schemes should also use automated systems, including electronic templates, to make publicly available, as a minimum, the information set out in an Annex to this Regulation. In order to ensure a level playing field within the internal market, the Commission should adopt implementing acts setting out standards and technical rules on the functioning and the interoperability of those certification registries …"*

Auditing of carbon removal and soil emission calculations (Art. 11)

The draft Implementation Regulation lacks sufficient clarity and operational detail on how **reversals** – i.e. the release of previously stored or sequestered carbon – are to be detected, reported, and accounted for, particularly with respect to liability and compensation mechanisms.

Article 11.3 briefly refers to "reversals" in the context of surveillance audits but does not define them clearly or set out concrete procedures for how reversal events should be managed. There is no reference to tools such as buffer pools, insurance mechanisms, or reversal accounting frameworks, which are widely recognised in carbon market practice as critical safeguards. Reversals are fundamental risks to the integrity of carbon removals, therefore both robust **ex-ante (risk mitigation) and ex-post (compensation) mechanisms** are necessary.

In the case of geological carbon storage (i.e. DACCS or BECCS), leakage of CO_2 from a storage reservoir could pose both technical and legal challenges. Under the EU ETS Directive and the CCS Directive, the storage operator is financially liable for leaked CO_2, including the obligation to surrender EU allowances for the released CO_2 emissions. However, this draft Implementing Regulation does not address the downstream consequence for the credit buyers – entities that may have retired a "permanent" carbon removal credit based on storage that later failed. If the reservoir contains a mixed stream of CO_2 from multiple sources, it may be technically and logistically challenging to attribute leakage to a specific source or credit. In theory, a pro-rata distribution approach could be applied, whereby all contributors share liability proportionally, but this could generate disproportionate administrative burdens for minor contributors – especially in the case of minor leakage events.

To maintain a functioning and credible system, the regulation should introduce **clear reversal protocols**, including:

- notification and transparency rules in the event of reversal
- pro-rata attribution methodologies
- minimum volume thresholds below which attribution or remediation is waived to avoid disproportionate administrative burdens
- the replacement or retirement of equivalent units to ensure continued credit integrity

A centrally managed "buffer pool" (sometimes referred to as a "reversal reserve") could also be established for the purpose of compensating verified reversals of previously certified carbon removals, drawing from best practices in international carbon standards. In practice, this involves a central reserve of unclaimed or temporarily held carbon credits, set aside to insure against future reversals. If a reversal occurs, credits are cancelled from the reserve to compensate for the loss.

Supervision of certification bodies by the Member States and the Commission (Art. 15)

We welcome **Article 15(1)**, which requires certification bodies and operators participating in the scheme *to "cooperate with the Commission and the national competent authorities of the Member States, including granting access to the premises of operators where requested, as well as making available to the Commission and the national competent authorities of the Member States all information needed to fulfil their tasks under [the CRCF Regulation]".*

As mentioned in point (c) under **Article 15(1)**, Member States may delegate the supervision of certification bodies to the national accreditation bodies pursuant to Regulation (EC) No 765/2008. However, **Article 15(2)** effectively allows certification bodies to choose which Member State supervises them, possibly selecting those with the most lenient oversight frameworks: *"… Member States may establish procedures allowing certification bodies, regardless of whether their head office is located in their Member State, to register for supervision and for carrying out the supervision."* This creates the potential for a **"light touch" supervisory forum-shopping loophole**.

Furthermore, **Article 15(2)** seems to suggest that certification bodies may even carry out the supervision of their own operations themselves. This **self-supervision loophole** is very concerning and needs to be addressed in the final Implementing Regulation. Certification bodies operate "on behalf of" certification schemes – including for issuing certificates of compliance (**Article 13(1)**), yet it is unclear how much the schemes are responsible for verifying the quality of the certification body's decisions. While certification schemes themselves monitor their certification bodies by reviewing audit reports as part of internal monitoring (**Article 5**), this exercise is only done "at least once a year" according to the draft rules. Similarly, the Commission has access to audit reports and certificates of compliance upon request (**Article 11(4)**), but no obligation for routine, proactive oversight is spelled out.

It is therefore essential that certification bodies, given the important role they play, are well supervised by regulators and/or third parties such as national accreditation bodies. We strongly recommend amending **Article 15(2)** to achieve this and remove the two loopholes mentioned above.

Certification registries (Art. 16)

Article 16 does not specify which specific measures shall be put in place to ensure the **interoperability of certification registries**. This is stressed in both Recital 36 and Article 12(3) in the CRCF Regulation: *"A certification registry shall use automated systems, including electronic templates, and shall be interoperable with registries of other recognised certification schemes in order to avoid double counting."*

We also encourage the European Commission to provide further information about the introduction of the **Union registry in 2028**. We understand that the CRCF Regulation does not ban independent or private registries, but that it introduces strict conditions on how they can continue to operate if they want to issue, manage or trade CRCF-certified units. Post-2028, these registries will thus have to link or synchronise with the Union registry if they decide to comply.

In July 2023, the European Commission mandated a report on minimum requirements for certification scheme registries, as part of the CRCF VERification Technical Assistance (VERTA project).[1] This report presented two high-level options for the Union registry in 2028 (Figure 1).

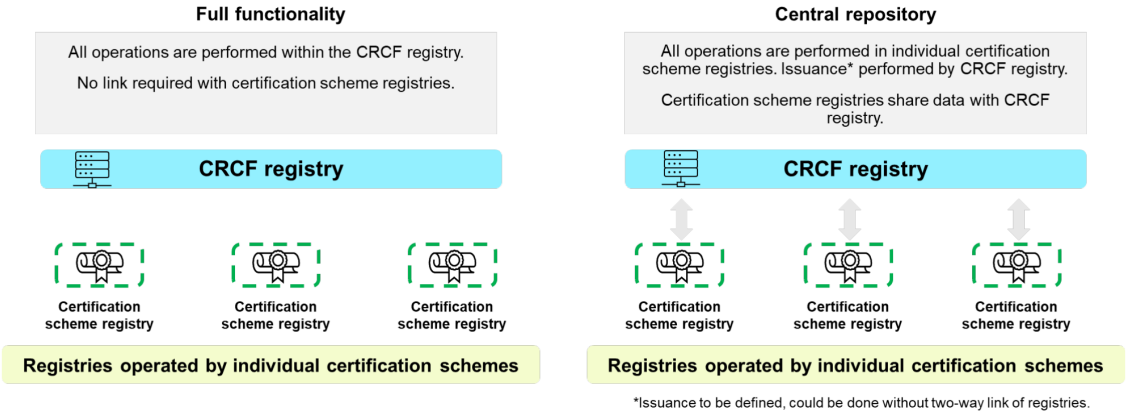

Figure 1. High-level options for the CRCF registry. Source: VERTA project (2023).

On the one hand, a "central repository" option would likely be easier to implement and therefore could constitute a stronger strategy in the short to medium term. On the other hand, a full-fledged, EU-wide registry would likely help reduce the risk of double counting and ensure data harmonisation, but it would likely require more time and a lot more resources to establish. Establishing an EU-wide and "fully functional registry" can thus become an interesting option in the longer term – especially if experience shows that, once the CRCF has been in operation for a while, a "central repository" is insufficient.

[1] Guidehouse, Trinomics and Ricardo (2023) 'Final report on: Scoping of the CRCF registry and minimum requirements for certification scheme registries'. Available online at: https://climate.ec.europa.eu/document/download/45708194-a447-46c7-8f81-cc96d621b490_en?filename=event_20250205_crcf_registry_rules_report_en.pdf

Recognition of certification schemes (Art. 17)

We believe that further clarification is needed on the role of the CRCF methodologies in relation to existing certification schemes.

Our understanding is that CRCF methodologies will established harmonised baseline requirements (or "minimum floor") that both existing and new certification schemes must comply with if they wish to be recognised under the CRCF. Recital 34 in the CRCF Regulation seems to confirm this point: *"In order to ensure that the control of certification is reliable and harmonised, the Commission should be able to adopt decisions recognising certification schemes that meet the requirements set out in this Regulation, including with respect to technical competence, reliability, transparency and independent auditing. Such recognition decisions should be limited in time and should be made publicly available. To that end, the Commission should adopt implementing acts on the content and processes of Union recognition of certification schemes."*

It is unclear, however, whether certification schemes must strictly adhere to these requirements (without any deviation) or whether they may exceed them by establishing more ambitious or tailored protocols. For instance, Recital 5 in the CRCF Regulation states that: *"… The voluntary nature of the Union certification framework means that existing and new public and private certification schemes will be able to apply for recognition by the Commission under this Regulation but will not be obliged to do so in order to operate in the Union."*

According to this last Recital, it would seem that CRCF methodologies serve indeed as "minimum requirements". However, we recommend that the European Commission clarifies this point in the provisions laid out in **Article 17** in this draft Implementing Regulation.

System-level oversight

We recommend the establishment of **robust system-level oversight**, anchored in an independent authority — likely the European Commission — tasked with continuously monitoring the integrity of the certification system at the Union level. This authority should be responsible for aggregating certification data from all certification schemes on at least a quarterly basis, and for analysing trends, identifying anomalies, and detecting potential failures or abuses in the system.

Crucially, the authority should also be **mandated to publish aggregated data** for transparency, including at minimum the total volume of certified carbon removals disaggregated by source country, carbon removal method, certification scheme, and retirement status (including by country of retirement). The UK renewable fuels regulators publish equivalent data[2] for certified fuels placed on the market in the UK; this is an example of best practice.

While the introduction of a Union registry (Article 16) is a positive technical step toward centralised data management, the registry's potential will only be fully realised if it is actively used by an independent authority with a clear mandate to conduct oversight, respond rapidly to emerging risks, and take corrective action where necessary.

This recommendation draws directly on lessons from the biofuels sector, where the absence of such system-level oversight allowed discrepancies and irregularities to go undetected for extended periods. In that system, it was only through time-consuming Freedom of Information requests and post-hoc data reconstruction that external parties were able to identify warning signs of potential fraud — such as sudden unexplained increases in particular fuel types that did not correspond to real-world production capacity. Such an approach is reactive, inefficient, and exposes the system to risk. Proactive oversight, backed by real-time data analysis, is therefore essential to safeguard the integrity of the CRCF framework.

Article 15 ('Supervision of certification bodies by the Member States and the Commission') provides for supervision but focuses primarily on certification bodies, not on systemic monitoring of carbon unit issuance trends or system-wide anomalies. Similarly, as previously mentioned in this paper, Article 9 ('Publication of information by certification schemes') requires publication of some governance information, but not operational data on certification volumes or trends. There is thus no explicit provision requiring system-level aggregation of certification data, active monitoring by the European Commission, or public reporting on trends in issuance, retirement, or potential irregularities. This is a serious omission and the final Implementing Regulation should be amended accordingly – with a new Article if necessary.

[2] UK Department for Transport, '*Renewable Transport Fuel Obligation (RTFO) statistics*'. Available online at: https://www.gov.uk/government/collections/renewable-transport-fuel-obligation-rtfo-statistics