

**Joint CCSA and ZEP response to the ICVCM Consultation: Core Carbon Principles (CCPs),
Assessment Framework and Assessment Procedure**

27th September 2022

The Carbon Capture Association (CCSA) and the Zero Emissions Platform (ZEP) support the initiative outlined by the ICVCM and the thorough consideration to ensure the activity of the voluntary carbon market crediting schemes are transparent, can drive good behaviour and promote industry best practice while instilling trust in carbon credits.

The CCSA represent members across the CCUS value chain, and represent members interested in deploying projects which can achieve the at scale, permanent removal of carbon dioxide through engineered solutions such as BECCS and DACCS.

ZEP is a European Technology and Innovation Platform (ETIP) under the European Commission's Strategic Energy Technology Plan (SET-Plan) and acts as the EU's technical adviser on the deployment of Carbon Capture and Storage (CCS), and Carbon Capture and Utilisation (CCU).

As noted by the recent publications from the IPCC, reaching net zero requires both carbon reductions and removals. CCS enabled carbon dioxide removals offers one of very few permanent solutions to remove CO₂ from the biosphere. It is imperative that accreditation schemes recognise and effectively communicate the critical role that permanent solutions can play to prevent catastrophic climate change and achieve global net zero targets.

ZEP and CCSA stand behind the 10 Core Carbon Principles (CCPs), provided that the additionality, permanence and quantification requirements can be clarified, and that a level playing field between nature-based and engineered solutions is fostered in the assessment framework. We share the ICVCM's view that high-quality robust and transparent systems for monitoring, verification, reporting and accounting should be at the core of certification schemes. Furthermore, it is crucial to be precise about what constitutes carbon removals and align carbon accounting principles with a full life-cycle methodology. This is essential to ensure that certificates are reliable and support real net zero removals and reductions.

Please find our comments below. We are pleased to contribute to the work process and remain available to expand on any element of our response, should you have any questions.

Section G – Additionality

1- Are there any specific criteria which the draft Assessment Framework should take into account in its guidance on additionality?

It is possible that compliance with additionality is harder to justify for projects receiving support from national or regional programmes (e.g., grant funding, business models), since they can be less dependent on revenues from carbon credit sales. For instance, it is not clear at the moment how Government supported capture on Energy from Waste projects, which contain both fossil and biogenic components, would be robustly viewed through the approach of the ICVCM, especially when considering the proposed additionality criteria.

2- The Council proposes in its draft Assessment Framework a risk-based assessment of additionality, to be conducted by the Expert Panel by project type, as a first step in the overall assessment of additionality for CCP.

a) Please provide comment as to the feasibility and desirability of this additional level of risk-based analysis by project type.

Criterion 8.2 “Barriers to implementation” lists a set of questions to be answered by the Expert Panel to determine if the implementation of mitigations activities is prevented by non-financial obstacles. CCSA and ZEP would like to highlight that the answers to the questions are likely to be very context specific, especially given the wide range of different technologies involved. Finally, the resulting expert judgement – which applies a quantitative scoring to considerations which appear to be more qualitative – would benefit from additional clarity regarding how the qualitative assessment is translated into quantitative values (e.g., through a scoring card).

Section H – Permanence

1- Are there alternative approaches to permanence that should be considered and that are not covered under the draft Assessment Framework?

ZEP and CCSA note that the storage of CO₂ in geological reservoirs is regulated under the CO₂ Storage Directive (CCS Directive¹) for European Union Member States, and the 2010 CO₂ Storage Regulations in the UK², which establish a legal framework for the safe geological storage of CO₂. Both storage legal frameworks include provisions for site selection and characterisation which are designed to minimise the risk of leakage, conditions for permitting, as well as monitoring and reporting requirements to verify storage, including remediation obligations in case of reversals.

According to the EU and UK storage legal frameworks, geological formations shall only be selected as a storage site if, under the proposed conditions of use, there is no significant risk of leakage or of harm to the environment or human health. Both EU and UK frameworks further require operators to carry out monitoring based on an approved monitoring plan which is updated every 5 years “to take account of changes to the assessed risk of leakage, changes to the assessed risks to the environment and human health, new scientific knowledge, and improvements in best available technology”. Operators are also required to report to competent authorities at least once a year.

Moreover, the conditions for the issuance of permits require operators to have an approved corrective measures plan which must be implemented in case of leakages. Both in the UK and in the EU, operators are required to surrender emission allowances equivalent to the leaked emissions.

Finally, there is a mandatory period of at least 20 years between closure and transfer of responsibility to the national competent authorities, where flexibility is maintained – i.e., a shorter transfer period can be agreed if evidence suggest that the stored CO₂ will be completely and permanently contained before the end of that period.

Given the stringent criteria that storage operators must comply with in the EU and in the UK, the ICVCM should make sure that the high-integrity requirements do not impose further, more stringent, disproportional requirements on operators. Instead, the assessment criteria should strive to be

¹ Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009 on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006

² <https://www.legislation.gov.uk/ukxi/2010/2221/contents/made>

aligned with the regulatory frameworks that can be considered good/best practice, also taking into account that a degree of flexibility must be preserved – as provided by the CO₂ Storage Directive – given the limited practical experience in the implementation of CCS projects.

In practice, nonalignment between the monitoring requirements and the regulatory frameworks could lead to disparities between the regulations defined by competent authorities and the criteria defined by the carbon crediting organisation. This is particularly challenging as, in most circumstances, the final ‘mixture’ of stored CO₂ in a subsurface storage reservoir will comprise of many sources of CO₂, including the CO₂ for which carbon credits have been allocated. In practice, this could result in a scenario where the storage site will require continual monitoring to satisfy carbon credit schemes (e.g. 50 years post injection, as per option 1 in Criterion 9.2a), past the required period to satisfy the competent authorities. Given that monitoring technologies are costly, and the survey would have to account for the mixed volume of CO₂, the economics/project liabilities may not be viable to encourage investment.

Option 3 of the requirements for **Criterion 9.2a** (“Length of commitment to monitor and compensate for reversals”) appears to allow for regulatory alignment; however, an explicit example would be valuable for wider positive interpretation of the permanence assessment.

Moreover, the assessment of **Criterion 9.2b** (“Sufficiency of the compensation mechanism”) should also take into account the provisions in the EU and UK CO₂ storage legal frameworks, according to which operators must offset reversals (in the EU or UK ETS). The requirement to set up buffer reserves would, in this context, impose extra obligations on EU/UK storage operators, as well as have potentially significant implications on revenue streams. In this context, it is important to introduce an alternative requirement/option - similar to option 3 under criterion 9.2a - that is meant to avoid conflicts with national / regional legislation while keeping the essence of the requirements.

Section I – Robust Quantification

ZEP and CCSA welcome the consideration of system/accounting boundaries in the assessment of the quantification methodologies. However, we emphasize that the achievement of carbon dioxide removals or reductions should be verified through a robust full life-cycle analysis (LCA) – this is the only way to ensure that real removals or reductions are occurring, and it must be a high integrity criterion in the ICVCM Assessment Framework.

Furthermore, underpinning a full LCA must be a clear definition of carbon emissions reductions and removals. ZEP has highlighted in its [report](#) that four principles must be met for activities to be considered as achieving removals:

1. CO₂ is physically removed from the atmosphere.
2. The removed CO₂ is stored out of the atmosphere in a manner intended to be permanent.
3. Upstream and downstream greenhouse gas emissions, associated with the removal and storage process, are comprehensively estimated and included in the emission balance.
4. The total quantity of atmospheric CO₂ removed and permanently stored is greater than the total quantity of CO₂ emitted to the atmosphere.

We urge ICVCM to align its definition of removals to the four principles outlined above, supporting a clear and precise understanding of what constitutes removals across carbon crediting schemes.

Section K – Attributes

1- Should the Integrity Council consider the establishment of an attribute to differentiate credits according to the type of underlying mitigation activity? If so, at what level should types be differentiated (e.g., reductions vs removals, tech-based vs nature-based)?

ZEP and CCSA welcome the proposal to differentiate carbon credits, not only distinguishing removals from reductions, but also considering the different types of removals. This approach would be beneficial to investors by reflecting the diversity of carbon removal solutions and their characteristics (e.g., duration of storage/removals), while clearly articulating the ‘high standard’ that permanent removals can provide.

The ICVCM should where possible and appropriate strongly highlight permanence as a key label (perhaps with a weighting type system).

Furthermore, we would like to see the wider benefits of engineered solutions better reflected in the assessment framework. The assessment framework consistently references how the co-benefits for the deployment of carbon removals will be assessed, including the contribution of mitigation activities towards the UN Sustainable Development Goals (SDG). However, little consideration is given to the wider co-benefits that are unique to the deployment of engineered solutions. These have several important elements:

- Early engineered carbon reductions and removal projects can help de-risk CO₂ networks. By providing reliable volumes of CO₂ into CO₂ transport and storage networks, the projects can reduce stranded asset risk for early and First of a Kind CO₂ networks. These projects will be an important consideration as the CCUS industry nucleates and scales up.
- Early projects can help provide economies of scale for other users of CO₂ networks.
- Engineered carbon removals can help accelerate the growth of a healthy CCUS ecosystem.
- Engineered carbon reductions and removal projects can contribute significantly towards regional decarbonisation agendas (e.g., cluster projects).
- By contributing to the decarbonisation of the power supply sector, CCS projects can provide clean flexibility to electricity grids.
- Reductions and removals projects benefit wider innovation, both technical and commercial.

These elements should be better reflected in the assessment framework (e.g., Criterion 11.1 – Transition towards net zero emissions, or as an extra label/attribute), as they capture the wider social value of engineered solutions, while providing valuable information to investors.

Moreover, we note that the current proposals have more attributes designed for nature-based solutions, which can lead to an unlevel playing field when considering the value that permanent engineered solutions can offer.