

EEB submission to the European Commission public consultation (deadline 2 May 2022): Certification of carbon removals – EU rules

Introduction

Responding to the urgency of climate action highlighted in the successive assessments of the Intergovernmental Panel for Climate Change (IPCC), the European Union has set in law its objective of economy-wide climate neutrality by 2050. The European Climate Law requires greenhouse gas (GHG) emissions and removals to be balanced within the European Union at the latest by 2050, with the aim of achieving negative emissions thereafter. Each single tonne of CO₂eq emitted into the atmosphere will have to be neutralised by a tonne of CO₂ removed from the atmosphere. To scale up carbon farming and industrial solutions for removing carbon from the atmosphere, the European Commission is working towards a legislative proposal in 2022 on a regulatory framework for the certification of carbon removals.

As underlined in the Communication on Sustainable Carbon Cycles, the establishment of the certification framework will be an essential stepping stone towards the transparent recognition of activities that remove carbon from the atmosphere in an environmentally sound manner. The certification rules should therefore set scientifically robust requirements for quality of measurement, monitoring, reporting and verification of the carbon removed from the atmosphere, the duration of the storage, the risk of reversal and the risk of carbon leakage increasing GHG emissions elsewhere. Requirements should also be set for the amount and type of energy used for the carbon removal process. The certification rules should put in place robust safeguards to make sure that carbon removal activities do no harm to biodiversity and other sustainability objectives. This is important to ensure that the EU can claim domestic climate neutrality while helping to achieve other objectives of the European Green Deal.

This public consultation invites public administrations, academic institutions, businesses, organisations and individuals to contribute to the preparation of an EU regulatory framework for the certification of carbon removals. The findings of the consultation (which will be summarised and published) will inform the impact assessment accompanying the Commission proposal on this initiative.

Scope

Question 1: What in your view are the main challenges regarding the integration of carbon removal in EU climate policies? at most 3 choice(s)

x	Ensuring that strong action to reduce emissions is not undermined by shifting focus on carbon removals.
	Ensuring a net contribution from removals to the achievement of climate neutrality.
	Ensuring precise, accurate and timely measurement for removals.
	Providing sufficient guarantees for the duration of carbon storage and the prevention of reversals.
x	Avoiding potential negative environmental impacts and complying with sustainability principles.
	Fostering cost-effective carbon removal solutions.
	Guaranteeing transparency of the benefits and costs of carbon removals.
	Setting appropriate baseline and demonstrating the additionality of removals.
x	Other (free text field below)

Other: Free text field - 500 characters maximum

500 characters maximum

A key challenge will be ensuring the quality of the certified removal. The certification system must have stringent monitoring requirements and robust governance to guarantee ground-truthed statements of the net amount of carbon removed, minimise the risk of intentional or unintentional reversals, and avoid double counting. The certification mechanism should only incentivise land-based carbon removal solutions with high environmental integrity that enhance biodiversity and ecosystem services.

Question 2: What should be the main criteria defining the types of carbon removals that EU climate policies should incentivise? at most 3 choice(s)

	Technical readiness and economic feasibility
	Potential for deployment at large scale
X	Robustness of monitoring, reporting and verification aspects
	Affordability of monitoring, reporting and verification aspects
X	Duration of carbon storage
	Risk of intentional or unintentional reversal of carbon removals
X	Potential environmental co-benefits
	Potential social benefits
	Other (free text field below)

Other: Free text field - 500 characters maximum

500 characters maximum

Question 3: Taking account of the aspects identified in the previous question, what carbon removal solutions should EU climate policies incentivise and in what time horizon?

Carbon farming solutions enhancing ecosystem removals

	As soon as possible	After 2030	Towards 2050	Never	No opinion
Afforestation under ecological principles				X	
Reforestation and forest restoration	X				
Sustainable forest management				X	
Agroforestry and mixed farming	X				
Increase of soil organic carbon on mineral soils				X	
Increase of soil organic carbon on organic soils					X
Wetlands and peatlands restoration	X				
Coastal marine ecosystem restoration and preservation	X				
Other (free text field below)	X				

Other: Free text field - 500 characters maximum

500 characters maximum

EU climate policies as a whole should incentivise all natural carbon removal solutions, but a CRC mechanism would not be well suited to include all, depending on the intended use of the certified units.

- Afforestation has a potentially negative impact on biodiversity in comparison to, e. g. healthy grasslands;
- SOC on mineral soils is not a mitigation measure due to the high risk of reversals;
- Sustainable forest management is a concept pinned by the forest industry with no robust definition.

Industrial solutions for carbon removals

	As soon as possible	After 2030	Towards 2050	Never	No opinion
Biochar				X	
Direct air capture with long-term or permanent carbon storage			X		
Bioenergy with carbon capture and long-term or permanent storage				X	
Geological storage of non-fossil CO2					X
Bio-based products with long lifetime (including for construction)					X
Utilisation of non-fossil CO2 in long lifetime products					X
Enhanced rock weathering					X
Other (free text field below)				X	

Other: Free text field - 500 characters maximum

500 characters maximum

- The environmental impacts of biochar are still uncertain and variable; over its full LCA it is not always a net removal; and it raises concerns regarding land-use.
- BECCS raises major concerns re.competition for land and biodiversity.
- Carbon storage in products diminishes over time, so this is a delayed emission, not a CDR.
- CCS should never be used with fossil fuel combustion, only for unabatable emissions in industrial processes.

Further research is needed before deployment of such solutions.

Would you have any additional comments on scope, please specify: (2500 characters maximum)

2500 characters maximum

EU climate policies as a whole should incentivise all natural carbon removal solutions, but a CRC mechanism would not be well suited to include all, depending on the intended use of the certified units. Although the consultation is on the topic of a CRC mechanism, the above questions ambiguously ask about all and any climate policies, which is highly misleading. We have answered with a focus on a CRC mechanism.

The IPCC 6th Report (AR6 WGIII SPM) refers to 'counter-balancing' hard-to-abate residual emissions with a limited amount of removals. The duration of carbon storage must be understood in the context of the carbon cycle: fossil CO₂ emissions are in the atmosphere for millennia, while other GHG have shorter return times. Therefore, land-based removals cannot offset emissions from burning fossil fuels.

Improving the accuracy of measurements and national reporting of nature-based GHG fluxes is urgently needed (e.g. correcting the mapping of organic soils), which should be tackled through the LULUCF Regulation and could be further refined through the CRC mechanism. A higher level of detail of monitoring is equally important to acquire reliable data for effective parcel-specific management to reduce emissions. A robust and transparent monitoring system is paramount for ensuring the quality of the certified removals (i. e. defining actual amount of removal, minimising risk of reversal, avoiding double counting). The EU must promote only high-quality carbon removals.

The certification mechanism should incentivise carbon removal solutions that ensure environmental integrity, deliver a net climate mitigation benefit, and do not provoke adverse environmental or social impacts (e. g. competition for land due to bioenergy production, be it within the EU or imported net land take). When it comes to natural solutions, they must also contribute to adaptation and enhance biodiversity and ecosystem services – most notably ecosystem restoration and agroecology. Involving local communities in CDR projects and ensuring social benefits is also crucial, and is a central aspect of the guidance for nature-based solutions developed by the IUCN.

Mixed farming and SOC on mineral soils should be promoted to increase soil health and farm resilience but not through the CRC mechanism. Technology-based solutions should not be used to compensate for emissions from burning fossil fuels; and additional research is needed so as to develop them in a way to become less energy-intensive.

The benefits of a certification framework to scale up high-quality carbon removals over the coming years

Question 4: Would you agree that establishing a robust and credible certification system for carbon removals is the first essential stepping stone towards achieving a net contribution from carbon removals in line with the EU climate-neutrality objective?

	Yes
X	No
	No opinion

Question 5: What would be the main objectives for the certification of carbon removals? at most 3 choice(s)

	To increase the transparency and level playing field of voluntary carbon markets.
	To allow comparability and competition between different carbon removal solutions
x	To provide better public incentives for nature-based and industrial carbon removals in EU and national funding programmes.
	To provide better financial incentives for land managers (e.g. purchasers of food and biomass products reward climate-friendly agriculture through price premiums or incentive payments – often called ‘in-setting’).
	To provide better financial incentives for carbon-storage products (e.g. bio-based products, woody construction material).
	To increase transparency in corporate sustainability reporting and foster the credibility of climate-neutrality claims.
	To support the labelling of sustainable products.
x	Other (free text field below)

Other: Free text field - 500 characters maximum

500 characters maximum

The CRC should aim to:

- Improve national reporting of land-based GHG fluxes and increase its transparency,
- Establish a clear link between reported GHG fluxes and specific land management practices at both national and farm-level,
- Set a robust policy framework for CDR accounting which prevents double counting and carbon leakage, and ensures environmental integrity.

The CRC could also provide a basis for result-based financing of carbon farming, but not through in- or offsetting.

The role of the EU in the certification of carbon removals

Question 6: Which role should the EU take in the certification of carbon removals?

	Voluntary carbon markets work well. There is no need for an additional intervention by the EU.
	The EU should establish minimum standard requirements on reporting transparency for carbon removals.
x	The EU should establish comprehensive standard requirements for carbon removals, e.g. on monitoring, reporting and verification, on the duration of the removal or baseline setting and additionality.

Question 7: What functions in the certification process should be carried out by private or public entities?

	Independent private entities	Public administration	No opinion
Establishment of certification methodologies		x	
Establishment of the system for accreditation of certification bodies		x	
Validation of the carbon removal project (ex-ante)		x	
Verification of removals made (ex-post)		x	

Would you have any additional comments on the role of the EU in the certification, please specify: (2500 characters maximum)

2500 characters maximum

The first essential stepping stone towards achieving a net contribution from carbon removals in the EU is a robust LULUCF regulation, with clear and ambitious targets and accurate monitoring and reporting requirements. A CRC mechanism can be an important part of EU climate policies and help deliver the LULUCF targets if it establishes strong and precise monitoring rules, robust governance, and a clear definition of the best carbon removals solutions to promote.

A very important step in establishing a CRC mechanism is to define what are credible carbon removal solutions and what are not. Scientific research points to ecosystem restoration and agroecology as being the only options for increasing natural removals that do not negatively impact on biodiversity, while at the same time enhancing ecosystem integrity. Such an approach improves the quality of carbon stocks and thereby their durability and reduces the risk of reversals.

Voluntary carbon markets are ill-suited to incentivise and scale up natural removals, due a.o. to administrative burden, inadequate modelling capacity and the lack of good MRV, and the complex question of liability for reversals. They are highly likely to undermine the effort of reducing emissions itself.

Furthermore, current carbon prices on VCM are massively inadequate to finance high-quality removals in the EU. The international VCM is teeming with fictitious offsets based on avoided emissions (e. g. not changing a forest into cropland), which make high-quality EU credits very uncompetitive.

All development of certification methodologies and governance systems should be under public administration, with private sector involved through stakeholder input and consultation. This is essential to establish a robust and credible carbon removals certification scheme that ensure high-quality removals, environmental integrity and avoid the issues of offsets, carbon leakage and double counting.

Finally, the EU must ensure that the CRC mechanism contributes to the objectives of the forthcoming Nature Restoration Law (NRL). We are concerned by the appearing lack of joined-up thinking between these two initiatives. The CRC should provide a tool to help achieve the targets of the NRL through improved monitoring capacity for

result-based financing. This means that for nature-based CDR, the CRC should focus on solutions based on ecosystems restoration.

Certification methodologies

Question 8: Carbon removal solutions can differ significantly, for example as regards duration of removals or robustness of monitoring, reporting and verification. In this context, do you think an EU certification framework should allow different types of certificates for different types of removals?

	The EU certification framework should define only the minimum criteria for the certification and should not comprehensively define the certificates.
	The EU certification framework should only allow a single type of certificate to ensure equivalence of certified carbon removals.
x	The EU certification framework should allow different types or sub-categories of certificates to better reflect the diversity of carbon removal solutions and their characteristics.

Question 9: Apart from diverging durations of existing carbon removal solutions, storage may also be prematurely interrupted and carbon may consequently be released back into the atmosphere. What approach could better manage this risk of intentional or unintentional reversal of carbon removals?

	Make removal providers liable for any reversal of removals and require them to offset any reversal.
	Encourage or require carbon removal providers to set up insurance systems or multi-project pooling mechanisms.
x	Require commitment to multi-year monitoring plans at the outset of the certification procedure.
	Issue certificates with specific durations (e.g. 5, 7 or 10 years) that can be renewed.
x	Require methods with a risk of reversal to be discounted or require a share of the removals to be stored in a buffer account (e.g. 10 to 25 per cent of the expected removals).

x	Other (free text field below)
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Other: Free text field - 500 characters maximum

500 characters maximum

Permanence is mostly an issue when carbon removals are used as offsets, which should not be the case since that would undermine emission reduction efforts.

All carbon removal certificates should be reported in national GHG inventories. Consequently, should it happen that a certified carbon removal is re-emitted into the atmosphere, that reversal should be accounted for as emission in the national inventory. This would then make all the above approaches (except multi-year monitoring) redundant.

Question 10: In voluntary carbon markets, the use of baseline and additionality concepts aims to quantify and reward only additional removals, i.e. those that go beyond a pre-identified baseline and would not have occurred in the absence of the incentives from the carbon removal mechanism. To what extent do you think the EU certification framework should include the concepts of baseline and additionality?

	The EU certification should establish a single methodology to define the baselines and assess additionality.
	The EU certification framework should allow for a variety of baselines and additionality criteria to cater for different types of removals.
	To best adapt to the use of the certificates in a specific context, the certification framework should not prescribe definitions for baseline and additionality criteria.
x	Other (free text field below)

Other: Free text field - 500 characters maximum

500 characters maximum

There should be strict additionality criteria for certificates financed by the private sector in order to ensure that their climate financing claims are substantiated by actual climate benefits. However, additionality is not necessary for public financing and removals reported in national inventories. Baselines should be calculated precisely in all cases, and should be ground-truthed. The use of regional (or other) benchmarks is not appropriate, as seen in California.

Question 11: What information should the certification for carbon removal disclose?

x	Type of carbon removals
x	Quantity of carbon removed
x	Information on the carbon removal provider
x	Information on the certificate owner
x	Information on monitoring, reporting and verification processes
x	Duration of carbon storage
x	Risk coverage and safeguards on sustainability objectives
x	Environmental benefits
x	Social benefits
x	Information on the baseline and additionality of the removal
x	Information on the use of the certificate and its contribution to the Paris Agreement with a view to avoiding double counting
x	Price if the certificate has been traded
	Other (free text field below)

Other: Free text field - 500 characters maximum

500 characters maximum

Would you have any additional comments on certification methodologies, please specify: (2500 characters maximum)

2500 characters maximum

The EU should urgently act to restore ecosystems at scale, especially those with high carbon sink potential, for both biodiversity and climate benefits. To reduce the risk of reversal from land-based removals, it is key to promote measures enhancing biodiversity and ecosystem functions. At the same time, additional governance measures are indispensable, such as long-term contractual commitments, obligations to ensure no deterioration after the project has ended, non-regression clauses, and maintaining a database of all result-based carbon farming projects. This will improve ecosystem integrity, which is related to the quality of carbon storage. The system must be fully in line with the EU Biodiversity Strategy and the new EU Forest Strategy.

The certification scheme should be result-based and must take into account all greenhouse gas fluxes influenced by land management practices, including energy used (e.g. in machinery) and embedded in inputs. The results must be ground-truthed by a robust monitoring system.

The buyers should not be entitled to claim carbon- or climate-neutrality on the basis of this financing, and should report transparently on their emissions and on their climate financing separately. In all cases, monitoring should be maintained permanently, even after a certificate has been nullified. To address the complex question of liability and permanence in this case, a system must be put in place that will act as insurance for potential reversals, such as buffer accounts.

Still, liability-, insurance- and buffer-based mechanisms may not be effective at actually preventing reversals. The emphasis must be on selecting options with least risk of reversal, and designing policy incentives as well as rules to further reduce that risk, and not on compensating for reversals after the fact.

Due to the different time scales of fossil and biogenic carbon fluxes, the land-based

certificates cannot be fungible for GHG emissions from the burning of fossil fuels.

Final remarks

Finally, are there any other important aspects that should be considered in establishing a regulatory framework for the certification of carbon removals in the EU?

X	Yes
	No

Please provide your additional remarks: (5000 characters maximum)

This questionnaire is highly biased and poorly designed, with many questions asked in very ambiguous terms and in some cases seemingly not in line with the topic of the consultation (most notably questions asking about “EU Climate policies” as a whole rather than the certification mechanism specifically). Additionally, many questions could not be answered meaningfully given the lack of information on the purpose of the initiative and the intended use of the certified units.

Although the initiative is presented in generic terms, most questions were framed in a way that clearly aimed at the creation of carbon credits to be traded on voluntary carbon markets. Voluntary carbon markets are only one of many possible financing mechanisms for carbon removals and should not be assumed to be a desirable choice without an adequate public debate. The choices made by the EU with regards to which financing mechanisms to promote are not neutral and will have major impacts on the integrity of our climate framework, on other environmental dimensions, and on rural populations, to name but a few.

We strongly believe that voluntary carbon markets are not well suited to finance the deep changes that are necessary in order to tackle the climate and biodiversity crises, ensure a dignified livelihood to farmers and ensure sustainable and healthy nutrition for all.



Should you wish to provide additional information (for example a position paper) or raise specific points not covered by the questionnaire, you can upload your additional document here.

Any document you upload will be published alongside your replies to the questionnaire, which is the essential input for this public consultation. An uploaded document is an optional addition and will serve as further background reading to better understand your position.