

# Certification of carbon removals – EU rules

Fields marked with \* are mandatory.

## Introduction

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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 CO<sub>2</sub>eq emitted into the atmosphere will have to be neutralised by a tonne of CO<sub>2</sub> 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.

## Guidance on the questionnaire

This public consultation consists of some introductory questions on your profile, followed by a questionnaire. Please note that you are not obliged to reply to all questions.

At the end of the questionnaire, you are invited to provide any additional comments and to upload additional information, position papers or policy briefs that express the position or views of yourself or your organisation.

The results of the questionnaire and uploaded position papers and policy briefs will be published online. Please read the specific privacy statement attached to this consultation stating how personal data and contributions will be dealt with.

In the interest of transparency, if you are replying on behalf of an organisation, please register with the register of interest representatives (if you have not already done so). Registering commits you to complying with a code of conduct. If you do not wish to register, your contribution will be handled and published with contributions received from individuals.

## About you

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### \* Language of my contribution

- Bulgarian
- Croatian
- Czech
- Danish
- Dutch
- English
- Estonian
- Finnish
- French
- German
- Greek
- Hungarian
- Irish
- Italian
- Latvian
- Lithuanian
- Maltese
- Polish
- Portuguese
- Romanian
- Slovak
- Slovenian
- Spanish
- Swedish

\* I am giving my contribution as

- Academic/research institution
- Business association
- Company/business organisation
- Consumer organisation
- EU citizen
- Environmental organisation
- Non-EU citizen
- Non-governmental organisation (NGO)
- Public authority
- Trade union
- Other

\* First name

FEAD

\* Surname

Secretariat

\* Email (this won't be published)

info@fead.be

\* Organisation name

*255 character(s) maximum*

FEAD - European Federation of Waste Management and Environmental Services

\* Organisation size

- Micro (1 to 9 employees)
- Small (10 to 49 employees)
- Medium (50 to 249 employees)
- Large (250 or more)

Transparency register number

*255 character(s) maximum*

Check if your organisation is on the [transparency register](#). It's a voluntary database for organisations seeking to influence EU decision-making.

## \*Country of origin

Please add your country of origin, or that of your organisation.

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| <input type="radio"/> Afghanistan         | <input type="radio"/> Djibouti                            | <input type="radio"/> Libya            | <input type="radio"/> Saint Martin                                 |
| <input type="radio"/> Åland Islands       | <input type="radio"/> Dominica                            | <input type="radio"/> Liechtenstein    | <input type="radio"/> Saint Pierre and Miquelon                    |
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| <input type="radio"/> Algeria             | <input type="radio"/> Ecuador                             | <input type="radio"/> Luxembourg       | <input type="radio"/> Samoa  |
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- Bermuda
- Bhutan
- Bolivia
- Bonaire Saint Eustatius and Saba
- Bosnia and Herzegovina
- Botswana
- Bouvet Island
- Brazil
- British Indian Ocean Territory
- British Virgin Islands
- Brunei
- Bulgaria
- Burkina Faso
- Burundi
- Cambodia
- Cameroon
- Canada
- Cape Verde
- Cayman Islands
- Central African Republic
- Chad
- Chile
- China
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- Greece
- Greenland
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- Guadeloupe
- Guam
- Guatemala
- Guernsey
- Guinea
- Guinea-Bissau
- Guyana
- Haiti
- Heard Island and McDonald Islands
- Honduras
- Hong Kong
- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Isle of Man
- Israel
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- Myanmar/Burma
- Namibia
- Nauru
- Nepal
- Netherlands
- New Caledonia
- New Zealand
- Nicaragua
- Niger
- Nigeria
- Niue
- Norfolk Island
- Northern Mariana Islands
- North Korea
- North Macedonia
- Norway
- Oman
- Pakistan
- Palau
- Palestine
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- Papua New Guinea
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- Turkey
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- Tuvalu
- Uganda
- Ukraine
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| <input type="radio"/> Cyprus                                 | <input type="radio"/> Latvia     | <input type="radio"/> Saint Barthélemy                                  | <input type="radio"/> Yemen                                      |
| <input type="radio"/> Czechia                                | <input type="radio"/> Lebanon    | <input type="radio"/> Saint Helena<br>Ascension and<br>Tristan da Cunha | <input type="radio"/> Zambia                                     |
| <input type="radio"/> Democratic<br>Republic of the<br>Congo | <input type="radio"/> Lesotho    | <input type="radio"/> Saint Kitts and<br>Nevis                          | <input type="radio"/> Zimbabwe                                   |
| <input type="radio"/> Denmark                                | <input type="radio"/> Liberia    | <input type="radio"/> Saint Lucia                                       |  |

The Commission will publish all contributions to this public consultation. You can choose whether you would prefer to have your details published or to remain anonymous when your contribution is published. **For the purpose of transparency, the type of respondent (for example, 'business association, 'consumer association', 'EU citizen') country of origin, organisation name and size, and its transparency register number, are always published. Your e-mail address will never be published.** Opt in to select the privacy option that best suits you. Privacy options default based on the type of respondent selected

### \* Contribution publication privacy settings

The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

**Anonymous**

Only organisation details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose

behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself if you want to remain anonymous.

**Public**

Organisation details and respondent details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published. Your name will also be published.

I agree with the [personal data protection provisions](#)

## Questions

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### 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)*

- 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.
- 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.
- Other

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)*

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### Technical readiness and economic feasibility

- Potential for deployment at large scale
- Robustness of monitoring, reporting and verification aspects
- Affordability of monitoring, reporting and verification aspects
- Duration of carbon storage
- Risk of intentional or unintentional reversal of carbon removals
- Potential environmental co-benefits
- Potential social benefits
- Other

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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Reforestation and forest restoration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Sustainable forest management	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Agroforestry and mixed farming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Increase of soil organic carbon on mineral soils	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increase of soil organic carbon on organic soils	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wetlands and peatlands restoration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Costal marine ecosystem restoration and preservation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Industrial solutions for carbon removals

	As soon as possible	After 2030	Towards 2050	Never	No opinion
Biochar	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Direct air capture with long-term or permanent carbon storage	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bioenergy with carbon capture and long-term or permanent storage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>



Geological storage of non-fossil CO2	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bio-based products with long lifetime (including for construction)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Utilisation of non-fossil CO2 in long lifetime products	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enhanced rock weathering	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Other	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please specify:

500 character(s) maximum

See below.

Would you have any additional comments on scope, please specify:

2500 character(s) maximum

Waste to energy with carbon capture and long-term or permanent storage should be recognised as an industrial carbon removal solution. Whilst prevention, reuse and recycling are fully stimulated, and disposal limited to a minimum, waste-to-energy plays an essential role in circularity, as it moves up the waste hierarchy by avoiding waste disposal and by being a key complement to more recycling. Waste-to-energy activities are not a competitor nor an alternative to recycling, but a complementary process to ensure the safe treatment of non-recyclable residual waste, be it from municipal or from industrial and commercial origin. In addition, waste-to-energy plants provide energy in the form of electricity and heat or biomethane (to both district heating and industries), which entails significant CO2 savings compared to electricity produced using fossil fuel. The current stringent and legally binding requirements for emissions control and energy efficiency, ensure that these plants operate in full alignment with European legislation.

Organic recovery of biowaste, such as the production of quality composts and fertilisers has a crucial role to play, especially for carbon farming. Our understanding is that this contribution is recognised as a good carbon farming practice in the Commission’s communication on ‘Sustainable Carbon Cycles’ under the item ‘enhancing soil organic carbon on degraded arable land’, but this should be made more explicit in future communications or legislative initiatives.

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
- 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
- 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.
- Other

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.
- 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
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Establishment of certification methodologies	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Establishment of the system for accreditation of certification bodies	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Validation of the carbon removal project (ex-ante)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Verification of removals made (ex-post)	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would you have any additional comments on the role of the EU in the certification, please specify:

*2500 character(s) maximum*

### 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.
- 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.
- 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.
- 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).
- Other

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.
- Other

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

- Type of carbon removals
- Quantity of carbon removed
- Information on the carbon removal provider
- Information on the certificate owner
- Information on monitoring, reporting and verification processes
- Duration of carbon storage
- Risk coverage and safeguards on sustainability objectives
-

Environmental benefits

- Social benefits
- Information on the baseline and additionality of the removal
- Information on the use of the certificate and its contribution to the Paris Agreement with a view to avoiding double counting
- Price if the certificate has been traded
- Other

Would you have any additional comments on on certification methodologies, please specify:

*2500 character(s) maximum*

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?

- Yes
- No

Please provide your additional remarks:

*5000 character(s) maximum*

As indicated in the Commission's proposal for a revised ETS, surrender obligations should not arise for emissions of CO<sub>2</sub> that end up permanently chemically bound in a product so that they do not enter the atmosphere under normal use.

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.

**Please upload your file(s)**

Only files of the type pdf,txt,doc,docx,odt,rtf are allowed

## **Contact**

CLIMA-C03-ARES@ec.europa.eu