



Council of the
European Union

Brussels, 15 September 2023
(OR. en)

12948/23

LIMITE

CLIMA 404
ENV 999
AGRI 518
FORETS 121
ENER 496
IND 471
COMPET 878
CODEC 1605

NOTE

From:	General Secretariat of the Council
To:	Delegations
No. prev. doc.:	10384/2/23 REV 2
Subject:	Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing a Union certification framework for carbon removals - Revised Presidency compromise text

With a view to the meeting of the Working Party on the Environment (WPE) on 21 September 2023, delegations will find attached a new revised Presidency compromise text, including also the recitals, on the abovementioned proposal. The compromise text has been prepared based on discussions in the WPE and written comments received from delegations.

Compared to the previous version of the Presidency text (doc. 10384/2/23 REV 2), new changes are marked as **bold and underlined**, deletions with ~~double strikethrough~~. Previous changes to the initial Commission proposal are marked as underlined and ~~strikethrough~~.

Proposal for a

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL
establishing a Union certification framework for carbon removals

THE EUROPEAN PARLIAMENT AND THE COUNCIL OF THE EUROPEAN UNION,

Having regard to the Treaty on the Functioning of the European Union, and in particular Article 192(1) thereof,

Having regard to the proposal from the European Commission,

After transmission of the draft legislative act to the national Parliaments,

Having regard to the opinion of the European Economic and Social Committee¹,

Having regard to the opinion of the Committee of the Regions²,

Acting in accordance with the ordinary legislative procedure,

Whereas:

- (1) Under the Paris Agreement adopted under the United Nations Framework Convention on Climate Change³ ('the Paris Agreement'), approved by Council Decision (EU) 2016/1841³, the international community has agreed to hold the increase in the global average temperature well below 2° C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5° C above pre-industrial levels. The Union and its Member States are Parties to the Paris Agreement and are strongly committed to its implementation by reduction of greenhouse gas emissions and increase in carbon removals.

¹ OJ C [...], [...], p. [...]

² OJ C [...], [...], p. [...]

³ Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change (OJ L 282, 19.10.2016, p. 1).

- (2) At a global scale, the ~~latest reports~~⁴ by the ~~Intergovernmental International~~ Panel on Climate Change (IPCC) points towards a decreasing likelihood of limiting global warming to 1.5 °C unless rapid and deep cuts in global greenhouse gas (GHG) emissions occur throughout the forthcoming decades. The IPCC reports⁵ also clearly states that ‘the deployment of carbon dioxide removal to counterbalance hard-to-abate residual emissions is unavoidable if net-zero carbon dioxide (CO₂) or GHG emissions are to be achieved’. This will require the large-scale deployment of sustainable activities for capturing CO₂ from the atmosphere and durably storing it in geological ~~reservoirs~~, terrestrial ~~and~~ **or ocean reservoirs** ~~marine ecosystems~~, or **in long-lasting** products. Today and with current policies, the Union is not on track to deliver the required carbon removals: carbon removals in terrestrial ecosystems have been decreasing in recent years, and no significant industrial carbon removals are currently taking place in the Union.
- (3) The aim of this Regulation is to develop a voluntary Union certification framework for carbon removals, with the view to ~~incentivise~~ **encourage** the uptake of high-quality carbon removals, in full respect of the biodiversity and the zero-pollution objectives, as a complement to sustained emission reductions (‘the Union certification framework’). It is thereby a tool to support the achievement of the Union objectives under the Paris Agreement, notably in particular the goal of collective achievement of the climate neutrality objective by 2050 laid down in Regulation (EU) 2021/1119 of the European Parliament and of the Council (**“the European Climate Law”**)⁵. The Union also committed to generate negative emissions after 2050. An important instrument to enhance carbon removals in terrestrial ecosystems is Regulation (EU) 2018/841 of the European Parliament and of the Council (**“LULUCF Regulation”**)⁶, ~~which is currently under review. The objective of the review is to~~ which sets out a Union net removals target of 310 million tonnes CO₂ equivalent by 2030 and ~~to allocate~~ respective targets to each Member State.

⁴ IPCC Working Group III (2022), Technical Summary. In: Climate Change 2022: Mitigation of Climate Change. Sixth Assessment Report (link).

⁵ Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 (‘European Climate Law’) (OJ L 243, 9.7.2021, p. 1).

⁶ Regulation (EU) 2018/841 of the European Parliament and of the Council of 30 May 2018 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU (OJ L 156, 19.6.2018, p. 1).

- (3a) A harmonized Union certification framework is expected to enhance the **environmental integrity and** transparency of **carbon removals and soil emission reductions** and promote trust in their certification of carbon removal activities while reducing the associated transaction costs. However, ~~the~~ The voluntary nature of the Union certification framework means that existing and new public and private certification schemes can apply for recognition by the Commission under this Regulation but are not obliged to do so in order to continue to operate in the Union.
- (3b) The European Climate Law Regulation (EU) 2021/1119 also sets out a binding Union climate target of a domestic reduction of net greenhouse gas emissions by at least 55% compared to 1990 levels by 2030. In order to ensure that sufficient mitigation efforts are deployed up to 2030, the contribution of net removals to the Union 2030 climate target is limited to 225 million tonnes CO₂ equivalent.
- (4) The Union certification framework will support the development of carbon **removal and soil emission reduction** activities in the Union that result in an unambiguous **positive climate impact** ~~net carbon removal benefit~~, while avoiding greenwashing. In the case of carbon farming, ~~such the~~ the Union certification framework should also encourage the uptake of ~~carbon removal~~ activities that generate co-benefits for biodiversity, therefore achieving the nature restoration targets set out in Union law on nature restoration. The Union certification framework will be instrumental in meeting the Union climate change mitigation objectives set in international agreements and in the Union legislation.

- (5) In order to support operators willing to make additional efforts to increase carbon removals in a sustainable way, the Union certification framework should take into account the different types of carbon removal activities, their specificities and related environmental impacts. Therefore, this Regulation should provide clear definitions of carbon removals, carbon removal activities, and other elements of the Union certification framework. Its scope should include carbon removal activities that enhance carbon storage in geological and terrestrial reservoirs, in long-lasting products and in the coastal and marine environment. Carbon removal activities **should include one or more practices or processes** ~~activities~~ that remove carbon from the atmosphere ~~and store it into a carbon pool~~. **Certain activities, such as those based on the use of biochar, can result in different types of carbon removal benefits depending on the specific conditions under which the activities take place.**
- (5a)** In the case of carbon farming, ~~carbon removal~~ **relevant** activities ~~can~~ also include activities **practices or processes** that reduce **emissions of greenhouse gases from soils**. These include activities that, ~~instead of a carbon removal, might~~ result in the reduction of carbon release **to the atmosphere** from a soil carbon pool, as set out in points (e) and (f) in Section B of Annex I to the LULUCF Regulation (EU) 2018/841, ~~to the atmosphere~~, **as is the case for instance for activities that improve soil management or restore degraded peatlands. In addition, reductions of emissions from agricultural soils, corresponding to the emissions from the IPCC source category of agricultural soils as reported in Table 3.D of the Common Reporting Format tables under the UNFCCC reporting guidelines on annual inventories for Parties included in Annex I to the Convention, should also be included in the quantification of carbon farming activities as long as these emission reductions result from an activity that overall reduces the emission of carbon from soil carbon pools or increases carbon removals in biogenic carbon pools.** On the contrary, ~~activities whose only goal is the avoidance of emissions, be it carbon release from and existing carbon sink (such as avoided deforestation) or non-CO₂ emissions which are not linked to a carbon pool, such as renewable energy projects or technologies to reduce agricultural non-CO₂ emissions, should not be considered as carbon removal activities,~~ **reduction of livestock emissions or renewable energy projects, which do not result in either carbon removals or soil emission reductions, should not be included in the scope of the Union certification framework.**

- (6) This Regulation should set out the requirements under which carbon removals **and soil emission reductions** should be eligible for certification under the Union certification framework. To this end, carbon removals **and soil emission reductions** should be quantified in an accurate and robust way; and they should be generated only by ~~carbon removal~~ activities that **respectively** generate a net carbon removal benefit **or a net soil emission reduction benefit**, are additional, **and** aim to ensure long-term storage of carbon. **They should, and have a neutral impact do no significant harm to the environment or and should be able to result in a** co-benefit on sustainability objectives. Furthermore, carbon removals **and soil emission reductions** should be subject to independent third-party auditing in order to ensure the credibility and reliability of the certification process. Mandatory Union carbon pricing rules established through Directive 2003/87/EC of the European Parliament and of the Council⁷ are in place which regulate the treatment of emissions from activities covered by that Directive. This Regulation should be without prejudice to Directive 2003/87/EC, except in relation to the certification of removals of emissions from ~~sustainable~~ **biofuels, bioliquids and** biomass **fuels** which **meet the EU sustainability and greenhouse gas emission saving criteria established under Directive (EU) 2018/2001 of the European Parliament and of the Council**⁸ ~~are zero-rated~~ in accordance with Annex IV thereto.
- (7) ~~An carbon removal~~ activity should result in a net carbon removal benefit **or a net soil emission reduction benefit** showing that it delivers a positive climate impact. The net carbon removal benefit **or the net soil emission reduction benefit** should be ~~computed~~ **quantified** following two steps.

⁷ Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ L 275, 25.10.2003, p. 32).

⁸ **Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82).**

(7a) In the first step for quantifying the net carbon removal benefit or the net soil emission reduction benefit, operators should quantify the amount of additional carbon removals or soil emission reductions that ~~an carbon removal~~ activity has generated in comparison to a baseline. ~~For carbon farming the operator should, in addition to carbon removals, also quantify the emission reductions of greenhouse gas emissions included in the scope of Regulation (EU) 2018/841, with the addition of N₂O emissions from drained organic croplands, in comparison to a baseline.~~ In the case of carbon farming, the quantified carbon removals or soil emission reductions should reflect the net sum of emissions and removals in all the relevant carbon pools, to ensure that any carbon release occurring in a carbon pool is taken into account in an appropriate way in computing the net benefit of the activity. A standardised baseline reflecting the standard performance of comparable activities in similar social, economic, environmental and technological circumstances and geographical locations should be preferred because it ensures objectivity, minimises compliance and other administrative costs, and positively recognises the action of first movers who have already engaged in carbon removal activities. In the context of carbon farming, the use of available digital technologies, including electronic databases and geographic information systems, remote sensing, artificial intelligence and machine learning, and of electronic maps, should be promoted to decrease the costs of establishing baselines and of monitoring carbon removal activities. However, where it is not possible to set such a standardised baseline, ~~a project-specific~~ an activity-specific baseline based on the operator's individual performance ~~may~~ should be used. In order to reflect the social, economic, environmental and technological developments and to encourage ambition over time in line with the Paris Agreement, the standardised baselines should be periodically updated by the Commission, while the activity-specific baselines should be updated by the operator at the beginning of each activity period, unless otherwise stated in the applicable certification methodologies.

- (8) The second step for quantifying the net carbon removal benefit **or net soil emission reduction benefit** should consist of subtracting any increase in greenhouse gas emissions related to the implementation of the ~~carbon removal~~ activity. Relevant greenhouse gas emissions that should be taken into consideration include direct emissions, such as those resulting from the use of more fertilisers, fuel or energy, or indirect emissions, such as those resulting from land use change, with consequent risks for food security due to displacement of agricultural production. **Any increase in greenhouse gases due to the implementation of the activity should be subtracted from the net carbon removal benefit or from the net soil emission reduction benefit in an appropriate way, in accordance with the technical rules set out in the relevant certification methodology.** A reduction in greenhouse gas emissions resulting from the implementation of the ~~carbon removal~~ activity, **other than the reduction of emissions from agricultural soils,** should not be taken into account to quantify the net carbon removal benefit **or the net soil emission reduction benefit**, but should be considered as a co-benefit towards the sustainability objective of climate change mitigation; by being reported on the certificates **of compliance**, decreases in greenhouse gas emissions (like the other sustainability co-benefits) can increase the value of the certified carbon removals. ~~The exception is for carbon farming where net greenhouse gas removals or emission reductions included in the scope of Regulation (EU) 2018/841 and N₂O emissions from drained organic croplands should be included in the quantification of the net carbon removal benefit.~~

- (9) A carbon removal activity delivers a net carbon removal benefit when the carbon removals above the baseline outweigh any increase in greenhouse gas emissions due to the implementation of the carbon removal activity. For instance, in the case of **carbon removal activities that deliver permanent carbon storage by injecting carbon underground, the amount of permanently stored carbon should outweigh the energy-related greenhouse gas emissions from the industrial process. Similarly, in the case of soil emission reduction activities, the net soil emission reduction benefit is positive if the soil emission reductions compared to the baselines outweigh any increase in greenhouse gases due to the implementation of the activity.** Carbon farming activities generally improves soil quality, which has a positive impact on soil resilience and productivity, but in some circumstances it might also generate a decrease in food production and therefore lead to a carbon leakage effect from indirect land-use change, and the related indirect emissions should be taken into account. ~~In the case of carbon farming, the~~ Any carbon captured by an afforestation activity or the carbon kept in the ground by a peatland re-wetting activity should outweigh the emissions from the machinery used to carry out the ~~carbon removal~~ activity or the indirect land use change emissions that can be caused by carbon leakage.
- (10) Carbon removals **and soil emission reductions, as well as the corresponding direct and indirect increases in greenhouse gas emissions,** should be quantified in a relevant, conservative, accurate, complete, consistent, **transparent,** and comparable manner. Uncertainties in the quantification should be duly reported and accounted in order to limit the risk of overestimating the quantity of carbon dioxide removed from the atmosphere **or of underestimating the quantity of direct and indirect greenhouse gas emissions generated by an activity.** Carbon removals **and soil emission reductions** generated by carbon farming should be quantified with a high level of accuracy to assure the highest quality and minimise uncertainties. Moreover, in order to incentivise synergies between Union climate and biodiversity objectives, enhanced monitoring of land needs to be required, thereby helping to protect and enhance the resilience of nature-based carbon removals throughout the Union. The satellite and on-site monitoring and reporting of emissions and removals need to closely reflect those approaches and make the best use of advanced technologies available under Union programmes, such as Copernicus, making full use of already existing tools, and ensure consistency with the national greenhouse gas inventories.

- (10a) In the choice of methods relevant to the calculations of greenhouse gases, a conservative approach should be applied in line with the IPCC guidelines for **national** greenhouse gas inventory estimates, **where applicable**. This means that the methods used should result in conservative emission or removal estimates, in that emissions are not **underestimated** ~~overestimated~~ and removals are not ~~underestimated~~ **overestimated**. ~~For the resulting total carbon removals or emissions of the carbon removal activity and the increase in direct and indirect greenhouse gas emissions, emissions should not be underestimated nor removals overestimated.~~
- (11) ~~In order to ensure that~~ The Union certification framework **should** channels incentives toward ~~carbon removals~~ **activities that are additional, meaning** that **they** go beyond the standard practice, ~~carbon removal activities should be additional~~. Therefore, these activities should go beyond statutory requirements, that is, operators should carry out activities that are not already imposed upon them by the applicable law. Moreover, carbon removal activities should take place due to the incentive effect provided by the certification. Such effect is present when the incentive created by the potential revenues, resulting from the certification, changes the behaviour of operators in such a way that they engage in the additional ~~carbon removal~~ activity to achieve additional carbon removals **or soil emission reductions**.
- (12) A standardised baseline should reflect the statutory and market conditions in which the ~~carbon removal~~ activity takes place. If ~~an carbon removal~~ activity is imposed upon operators by the applicable law, or it does not need any incentives to take place, its performance will be reflected in the baseline. For this reason, ~~an carbon removal activity~~ that generates carbon removals **or soil emission reductions** in excess of such a baseline should be presumed to be additional. Hence, the use of a standardised baseline should simplify the demonstration of additionality for operators. Therefore, it should reduce the administrative burden of the certification process, which is particularly important in the case of small-scale land managers.

- (13) Atmospheric and biogenic carbon that is captured and stored through a carbon removal activity risks being released back into the atmosphere (e.g. reversal) due to natural or anthropogenic causes. Therefore, operators should take all relevant preventive measures to mitigate those risks and duly monitor that carbon continues to be stored over the monitoring period laid down for the relevant ~~carbon removal~~ activity. The validity of the certified carbon removals should depend on the expected duration of the storage and the different risks of reversal associated with the given ~~carbon removal~~ activity. Activities that store carbon in geological formations provide enough certainties on the very long-term duration of several centuries for the stored carbon and can be considered as providing permanent storage of carbon. **Products with chemically permanently bound carbon have a very low or no risk of carbon release.** Carbon farming or carbon storage in **long-lasting** products are more exposed to the risk of voluntary or involuntary release of carbon into the atmosphere. To account for this risk, the validity of the certified carbon removals generated by carbon farming and carbon storage in products should be subject to an expiry date matching with the end of the relevant monitoring period. Thereafter, the carbon should be assumed to be released into the atmosphere. **The certification methodologies should promote the prolongation of the monitoring period of carbon farming activities, in order to ensure the long-term storage of the carbon removed in soils or biomass and to provide financial incentives to carbon farming operators in the long term.**
- (14) In addition to measures taken to minimise the risk of carbon release into the atmosphere during the monitoring period, appropriate liability mechanisms should be introduced to address cases of reversal. Such mechanisms could include e.g. discounting of carbon removal units, collective buffers or accounts of carbon removal units, and up-front insurance mechanisms. Since liability mechanisms in respect of geological storage and CO₂ leakage, and relevant corrective measures have already been laid down by Directive 2003/87/EC and Directive 2009/31/EC of the European Parliament and of the Council⁹, those liability mechanisms and corrective measures should apply to avoid double regulation.

⁹ 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 (OJ L 140, 5.6.2009, p. 114).

- (15) Carbon removal **and soil emission reduction** activities have a strong potential to deliver win-win solutions for sustainability, even if trade-offs cannot be excluded. Therefore, it is appropriate to establish minimum sustainability requirements to ensure that ~~carbon removal~~ **these** activities **do not lead to significant harm to the environment** ~~have a neutral impact or~~ **and should be able to** generate co-benefits for the sustainability objectives of climate change mitigation and adaptation, the protection and restoration of biodiversity and ecosystems, the sustainable use and protection of water and marine resources, the transition to a circular economy, and pollution prevention and control. Those sustainability requirements should, as appropriate, and taking into consideration local conditions, build on the technical screening criteria for Do Not Significant Harm concerning forestry activities and underground permanent geological storage of CO₂, laid down in Commission Delegated Regulation (EU) 2021/2139¹⁰, and on the sustainability **and GHG emission saving** criteria for ~~forest and agriculture biomass raw material~~ **biofuels, bioliquids, and biomass fuels** laid down in Article 29 of Directive (EU) 2018/2001 ~~of the European Parliament and of the Council~~¹¹, **including promoting the cascading use of biomass**. Practices, such as forest monocultures, that produce harmful effects for biodiversity should not be eligible for certification.

¹⁰ Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives (OJ L 442, 9.12.2021, p. 1).

¹¹ ~~Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (OJ L 328, 21.12.2018, p. 82).~~

- (16) Farming practices that remove CO₂ from the atmosphere ~~or reduce the release of carbon to the atmosphere~~ **soil emissions** contribute to the climate neutrality objective and should be rewarded, either via the Common Agricultural Policy (CAP) or other public or private initiatives. Specifically, this Regulation should take into account farming practices as referenced in the Commission Communication of 15 December 2021 on Sustainable Carbon Cycles¹², including afforestation, reforestation and activities within sustainable forest management; agroforestry and other forms of mixed farming; use of catch crops, cover crops conservation tillage and increasing landscape features; conversion of cropland to fallow or set-aside areas to permanent grassland; and restoration of peatlands and wetlands. When developing certification methodologies in the context of carbon farming, the Commission should take into account the need to minimise negative impacts on food security and to avoid that land is acquired for speculative purposes resulting in negative effects on rural communities. It should **avoid negative impacts on biodiversity and also** promote those activities that have the largest potential to provide positive co-benefits for biodiversity, as well as consider the long-term forest structure, **the long-term stability of carbon pools, ecosystem health**, resilience and risk of natural disturbances.
- (17) Operators or groups of operators may report co-benefits that contribute to the sustainability objectives beyond the minimum sustainability requirements. To this end, their reporting should comply with the certification methodologies tailored to the different carbon removal activities, developed by the Commission. Certification methodologies should, as much as possible, incentivise the generation of co-benefits for biodiversity going beyond the minimum sustainability requirements. These additional co-benefits will give more economic value to the certified ~~carbon removals~~ **units** and will result in higher revenues for the operators. In the light of these considerations, it is appropriate for the Commission to prioritise the development of tailored certification methodologies on carbon farming activities that provide significant co-benefits for biodiversity.

¹² ~~Communication from the Commission, Sustainable Carbon Cycles, COM (2021) 800.~~

(18) It is appropriate to develop detailed certification methodologies for the different ~~carbon removal~~ activities in order to apply, in a standardised, verifiable and comparable way, the quality criteria laid down in this Regulation. Those methodologies should ensure the robust and transparent certification of the net carbon removal or soil emission reduction benefit generated by the ~~carbon removal~~ activity, while avoiding disproportionate administrative burden for operators or group of operators, in particular for small farmers and forest holders. To this end, the Commission should be empowered to supplement this Regulation by adopting delegated acts establishing detailed certification methodologies for the different ~~carbon removal~~ activities. Those methodologies should be developed in close consultation with the Expert Group on Carbon Removals and all other interested actors. They need to be based on the best available scientific evidence, build upon existing public and private schemes and methodologies for ~~carbon removal~~ certification of carbon removals or soil emission reductions, and take into account any relevant standard and rules adopted at national and Union level.

(18a) Given the need to rapidly scale up carbon removals activities in the Union, it is **appropriate** for ~~desirable that~~ the Commission at the first stage of the development of those methodologies to prioritise those ~~carbon removal~~ activities that are the most mature, **that can provide sustainability co-benefits** or where Union legislation relevant for the development of those methodologies has already been adopted. [The Innovation Fund established under ~~the ETS Directive 2003/87/EC~~ sets out rules relevant for the development of certification methodologies for bioenergy with carbon capture and storage and direct air capture.]

- (19) In order to ensure a credible and reliable certification process, carbon removal **and soil emission reduction** activities should be subject to independent third-party auditing. In particular, ~~carbon removal~~ activities should be subject to an initial certification audit before their implementation, verifying their compliance with the quality criteria set out in this Regulation, including the correct quantification of the expected net carbon removal **or soil emission reduction** benefits. ~~Carbon removal~~ **A** activities should also be subject to ~~periodic~~ re-certification audits to **periodically** verify ~~the compliance of the generated carbon removals~~. To this end, the Commission should be empowered to adopt implementing acts to set out the structure, technical details, and the minimum information to be contained in the ~~description of the carbon removal~~ activity **plan and monitoring plan**, and in the certification and re-certification audit reports.
- (20) Providing land managers with improved knowledge, tools and methods for a better assessment and optimisation of the carbon removals **and of the soil emission reductions** is key for cost-efficient implementation of mitigation actions and for securing their engagement in carbon farming. This is particularly relevant for Union small farmers or forest holders that often lack the know-how and the expertise required to implement carbon removal activities and to comply with the required quality criteria and related certification methodologies. Therefore, it is appropriate to require that producer organisations facilitate the provision of relevant advisory services through technical advice to their members. The Common Agricultural Policy and national State aid can support financially the provision of advisory services, knowledge exchange, training, information actions or interactive innovation projects with farmers and foresters.

- (21) It is appropriate that ~~carbon-removal~~ certificates **of compliance** underpin different end-uses, such as the compilation of national and corporate greenhouse gas inventories, including with regard to **the LULUCF Regulation (EU) 2018/841 of the European Parliament and of the Council**¹³, the proof of climate-related and other environmental corporate claims (including on biodiversity), or the exchange of **certified** ~~verified carbon-removal~~ units through voluntary carbon offsetting markets. To this end, the certificate **of compliance** should contain accurate and transparent information on the ~~carbon-removal~~ activity, including the total **carbon** removals or **soil emission reductions**, and net carbon removal **benefits or soil emission reduction** benefits that comply with the quality criteria set out in this Regulation. The Commission should be also empowered to adopt delegated acts to further specify or amend **Annex I which lists the essential elements to be contained in the certification methodologies, and** Annex II which lists the minimum information to be contained in the certificates **of compliance**.
- (22) To ensure an accurate, robust and transparent verification, certification bodies responsible for performing the certification ~~of carbon-removal activities~~ **process** should have the required competences and skills and should be accredited by national accreditation authorities pursuant to Regulation (EC) No 765/2008 of the European Parliament and of the Council¹⁴. To avoid possible conflicts of interest, the certification bodies should also be completely independent from the operator carrying out the ~~carbon-removal~~ activity that is subject to the certification. In addition, Member States should contribute towards ensuring the correct implementation of the certification process by supervising the operation of certification bodies that are accredited by national accreditation authorities, and by informing the certification schemes about relevant non-conformity findings.

¹³ — ~~Regulation (EU) 2018/841 of the European Parliament and of the Council of 30 May 2018 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework, and amending Regulation (EU) No 525/2013 and Decision No 529/2013/EU (OJ L 156, 19.6.2018, p. 1).~~

¹⁴ Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93 (OJ L 218, 13.8.2008, p. 30).

- (23) Certification schemes should be used by operators to demonstrate compliance with this Regulation. Therefore, certification schemes should operate on the basis of reliable and transparent rules and procedures and should ensure accuracy, reliability, integrity and non-repudiation of origin, and protection against fraud of information and of data submitted by operators. They should also ensure the correct accounting of the verified carbon removal **or soil emission reduction** units, notably by avoiding double counting. To this end, the Commission should be empowered to adopt implementing acts setting out technical harmonised rules on certification, including adequate standards of reliability, transparency, accounting and of independent auditing to be applied by certification schemes, so as to ensure the necessary legal certainty as regards the rules applicable to operators and to certification schemes. To ensure a cost-effective certification process, those technical harmonised rules on certification should also have the objective of reducing unnecessary administrative burden for operators, or group of operators, in particular for Small and Medium Enterprises (SMEs), including small farmers and foresters.
- (24) In order to ensure a reliable and harmonised control of certification, 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. To this end, the Commission should be empowered to adopt implementing acts on the content and processes of Union recognition of certification schemes.
- (25) The provisions of the United Nations Economic Commission for Europe (UNECE) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters¹⁴ ('the Aarhus Convention'), approved by Council Decision 2005/370/EC¹⁵ ~~regarding access to information, public participation in decision-making, and access to justice in environmental matters, in particular the provisions relating to public participation and to access to justice remain applicable, where relevant.~~

¹⁵ Council Decision 2005/370/EC of 17 February 2005 on the conclusion, on behalf of the European Community, of the Convention on access to information, public participation in decision-making and access to justice in environmental matters (OJ L 124, 17.5.2005, p. 1).

- (26) ~~Certification schemes should establish and maintain interoperable public registries in order to ensure transparency and full traceability of certified units, and to avoid the risk of fraud and double counting, the Commission should set up a Union certification registry within 4 years from entry into force of this Regulation.~~ Fraud may occur if more than one certificate is issued for the same ~~carbon removal~~ activity because the activity has been registered under two different certification schemes or has been registered twice under the same scheme. Fraud may also occur when the same certificate is used several times to make the same claim based on ~~an~~ carbon removal activity or a ~~carbon removal~~ **certified** unit. The **Union** registries should store the documents resulting from the certification process ~~of carbon removals~~, including summaries of certification audits and re-certification audit reports, the certificates and updated certificates, and make them publicly available in electronic form. The registries should also record the certified ~~carbon removal~~ units that meet the Union quality criteria. **The Commission should be empowered to adopt delegated acts setting out standards and technical rules on the functioning of the Union registry, including, if appropriate, a proportionate contribution from users to its financing and management. Until the establishment of the Union registry, certification schemes recognised by the Commission should establish and maintain interoperable public registries.** In order to ensure a level playing field within the ~~single internal~~ market, the Commission should be empowered to adopt implementing rules setting out standards and technical rules on the functioning and the inter-operability of those registries.
- (27) Certification schemes play an important role in providing evidence of compliance with ~~this quality criteria for carbon removals~~ **Regulation**. It is therefore appropriate for the Commission to require certification schemes to report regularly on their activity. Such reports should be made public, in full or where appropriate in an aggregated format, in order to increase transparency and to improve supervision by the Commission. Furthermore, such reporting would provide the necessary information for the Commission to report on the operation of the certification schemes with a view to identifying best practices and submitting, if appropriate, a proposal to further promote such best practices. In order to ensure comparable and consistent reporting, the Commission should be empowered to adopt implementing acts setting out the technical details on the content and format of the reports drawn up by the certification schemes.

- (28) To enable operators to apply the quality criteria set out in this Regulation in a standardised and cost-effective way, while taking into account the specific characteristics of different ~~carbon-removal~~ activities, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission to supplement this Regulation by establishing detailed certification methodologies for different types of ~~carbon-removal~~ activities. ~~The Commission should also be able to have the power to amend Annex II listing the minimum information to be contained in the certificates.~~ It is of particular importance that the Commission carry out appropriate consultations during its preparatory work, including at expert level, and that those consultations be conducted in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making¹⁶. In particular, to ensure equal participation in the preparation of delegated acts, the European Parliament and the Council receive all documents at the same time as Member States' experts, and their experts systematically have access to meetings of Commission expert groups dealing with the preparation of delegated acts.
- (29) The implementing powers conferred on the Commission should be exercised in accordance with Regulation (EU) No 182/2011 of the European Parliament and of the Council¹⁷. In order to exercise the implementing powers laid down in this Regulation, the Commission should be assisted in its tasks under this Regulation by a the Climate Change Committee established ~~pursuant to Article 44(3) of Regulation (EU) 2018/1999 of the European~~ Parliament and of the Council¹⁸.

¹⁶ OJ L 123, 12.5.2016, p. 1

¹⁷ Regulation (EU) No 182/2011 of the European Parliament and of the Council of 16 February 2011 laying down the rules and general principles concerning mechanisms for control by Member States of the Commission's exercise of implementing powers (OJ L 55, 28.2.2011, p. 13).

¹⁸ Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).

- (30) The Commission should review the implementation of this Regulation 3 years following ~~the~~ its entry into force ~~of this Regulation~~, and subsequently not later than six months after the global stocktake agreed under Article 14 of the Paris Agreement. Those reviews should take into account the relevant developments concerning the Union legislation, technological and scientific progress, market developments in the field of carbon removals and food security including food availability and affordability, **the environmental impacts of increased biomass use resulting from this Regulation, including impacts on land degradation and ecosystem restoration**, and should be informed by the results of the global stocktake of the Paris Agreement.
- (31) ~~Since t~~The objectives of this Regulation, namely to promote the deployment of high quality carbon removals while minimising the risk of greenwashing, cannot be sufficiently achieved by the Member States ~~alone~~, but can rather ~~and~~ by reason of the scale and effects of the proposed action, ~~those objectives can~~ be better achieved at Union level. ~~Therefore~~, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Regulation does not go beyond what is necessary to achieve those objectives,

HAVE ADOPTED THIS REGULATION:

Chapter 1

GENERAL PROVISIONS

Article 1

Subject matter and scope

1. The objective of this Regulation is to facilitate ~~and incentivise~~ encourage the deployment of carbon removals, as a complement to sustained emission reductions, by operators or groups of operators. To that end, this Regulation establishes a voluntary Union framework for the certification of carbon removals and soil emission reductions by laying down:
 - (a) quality criteria for carbon removal or soil emission reduction activities that take place in the Union;
 - (b) rules for the verification and certification of carbon removals and soil emission reductions;
 - (c) rules for the functioning and recognition by the Commission of certification schemes.
- 1a. This Regulation aims to support the achievement of the Union objectives under the Paris Agreement, in particular the collective achievement of the climate neutrality objective by 2050 laid down in Regulation (EU) 2021/1119. Accordingly, all removals and emission reductions generated under this Regulation shall contribute to achieving the Union's climate objectives.
2. This ~~voluntary Union framework for the certification of carbon removals~~ Regulation does not apply to emissions falling within the scope of Directive 2003/87/EC, with the exception of the storage of carbon dioxide emissions from biofuels, bioliquids and sustainable biomass fuels that ~~are zero-rated~~ complies with ~~meet~~ meet the sustainability criteria and greenhouse gas emission saving criteria established under Directive (EU) 2018/2001 in accordance with Annex IV thereto of Directive 2003/87/EC.

Definitions

≡ For the purposes of this Regulation, the following definitions apply:

- (a) ‘carbon removal’ means ~~either the storage anthropogenic removal of carbon from the atmosphere or biogenic carbon and its durable storage within geological, or biogenic carbon pools, biogenic carbon pools, in terrestrial or ocean reservoirs, or in long-lasting products and materials and or the marine environment, or the reduction of carbon release from a biogenic carbon pool to the atmosphere;~~
- (aa) ‘soil emission reduction’ means the reduction of net greenhouse gas emissions from biogenic carbon pools as set out in points (e) and (f) of Section B of Annex I to Regulation 2018/841 or the reduction of greenhouse gas emissions from **the IPCC source category the reporting category of agricultural soils as determined pursuant to Regulation (EU) 2018/1999 of the European Parliament and of the Council**¹⁹;
- (b) ‘carbon removal activity’ means one or more practices or processes carried out by an operator, or a group of operators, resulting in permanent carbon removals storage, enhancing carbon capture in a biogenic carbon pool, reducing the release of carbon from a biogenic carbon pool to the atmosphere, or storing atmospheric or biogenic carbon in long-lasting or materials;
- (ba) ‘soil emission reduction activity’ means one or more practices or processes carried out by an operator, or a group of operators, resulting in soil emission reductions with the aim to generate carbon removals in the future;

¹⁹ **Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council (OJ L 328, 21.12.2018, p. 1).**

- (bb) ‘activity’ means either a carbon removal activity or a soil emission reduction activity;
- (c) ‘biogenic carbon pool’ means above-ground biomass, below-ground biomass, litter, dead wood and soil organic carbon as set out in points (a) to (f) of Part Section B of Annex I to Regulation 2018/841;
- (d) ‘operator’ means any legal or physical person or public entity who operates or controls an carbon-removal activity, or to whom decisive economic power over the technical functioning of the activity has been delegated;
- (e) ‘group of operators’ means a legal entity that represents more than one operator and is responsible for ensuring that those operators comply with this Regulation;
- (ea) ‘activity period’ means a period, the duration of which is determined in the applicable certification methodology in accordance with the type of carbon removal activity, over which the carbon removal activity generates a certified net carbon removal benefit or a net soil emission reduction benefit, and which is determined in the applicable certification methodology;
- (f) ‘monitoring period’ means a period over which the storage of carbon is monitored by an operator or a group of operators and, the duration of which shall cover at least the activity period as is determined in the applicable certification methodology in accordance to with the type of carbon removal activity, over which the storage of carbon is monitored by the operator;
- (g) ‘permanent carbon storage’ means a carbon removal activity that, under normal circumstances and using appropriate management practices, stores atmospheric or biogenic carbon for several centuries, including such as bioenergy with carbon capture and storage and direct air carbon capture and storage;

- (h) ‘carbon farming’ means an ~~carbon removal~~ activity related to terrestrial or coastal land management carried out by an operator, or a group of operators, that results in carbon removals or soil emission reductions ~~the increase of carbon storage in living biomass, dead organic matter and soils by enhancing carbon capture and/or reducing the release of carbon to the atmosphere;~~
- (i) ‘carbon storage in products’ means a carbon removal activity that either permanently chemically binds carbon in a product or stores atmospheric and biogenic carbon for several decades in long-lasting products ~~or materials;~~
- (ia) ‘permanently chemically bound’ means that the carbon does not enter the atmosphere under normal use, including any normal activity taking place after the end of life of the product, in accordance with Article 12(3b) of Directive 2003/87/EC;
- (j) ‘certification body’ means an independent, accredited or recognised conformity assessment body that has concluded an agreement with a certification scheme to carry out certification audits and issue certificates of compliance;
- (k) ‘certification scheme’ means a scheme managed by a private or public organisation that oversees the certification of compliance of operators or group of operators with this Regulation;
- (l) ‘certification audit’ means an audit carried out by a certification body;
- (m) ‘re-certification audit’ means an audit carried out in the process of renewing a certificate issued by a certification body;
- (n) ‘certificate of compliance’ means a conformity statement issued by the certification body certifying that the ~~carbon removal~~ activity complies with this Regulation;
- (o) ‘carbon removal unit’ means one metric tonne of CO₂ equivalent of certified net carbon removal benefit generated by a carbon removal activity and registered by a certification scheme in its a certification registry or, as appropriate, in the Union registry referred to in Article 12;

(p) ‘soil emission reduction unit’ means one metric tonne CO₂ equivalent of certified net soil emission reduction benefit generated by a soil emission reduction activity and registered by a certification scheme in its certification registry or, as appropriate, in the Union registry referred to in Article 12.

Article 3

Eligibility for certification

Carbon removals and soil emission reductions shall be eligible for certification under this Regulation where they meet both of the following conditions:

- (a) they are generated from an carbon removal activity that complies with the quality criteria set out in Articles 4 to 7;
- (b) they are independently verified in accordance with Article 9.

Chapter 2

QUALITY CRITERIA

Article 4

Quantification

1. For permanent carbon storage and carbon storage in products, a ~~A~~ carbon removal activity shall provide a net carbon removal benefit, which shall be quantified using the following formula:

$$\text{Net carbon removal benefit} = \text{CR}_{\text{baseline}} - \text{CR}_{\text{total}} - \text{GHG}_{\text{increase}} > 0$$

where:

- (a) $\text{CR}_{\text{baseline}}$ is the carbon removals under the baseline;
- (b) CR_{total} is the total carbon removals of the carbon removal activity;

- (c) $\text{GHG}_{\text{increase}}$ is the increase in direct and indirect greenhouse gas emissions, ~~other than those from biogenic carbon pools in the case of carbon farming, which are~~ is due attributable to the implementation of the carbon removal activity.

1a For carbon farming, an ~~carbon removal~~ activity shall provide a net carbon removal benefit or a net soil emission reduction benefit ~~or both~~, which shall be quantified using the following formulas:

$$\text{Net carbon removal benefit} = \text{CR}_{\text{baseline}} - \text{CR}_{\text{total}} + \text{RC}_{\text{baseline}} - \text{RC}_{\text{total}} - \text{GHG}_{\text{increase}} > 0$$

where:

(a) $\text{CR}_{\text{baseline}}$ is the **net** carbon removals under the baseline;

(b) CR_{total} is the total **net** carbon removals of the carbon removal activity;

~~(c) $\text{RC}_{\text{baseline}}$ is the release of carbon under the baseline;~~

~~(d) RC_{total} is the release of carbon under the carbon removal activity;~~

~~(e) $\text{GHG}_{\text{increase}}$ is the increase in direct and indirect greenhouse gas emissions, which are~~ $\text{GHG}_{\text{increase}}$ is the increase in direct and indirect greenhouse gas emissions, which ~~are~~ is due to the implementation of the carbon removal activity.

$$\text{Net soil emission reduction benefit} = \text{RC}_{\text{baseline}} - \text{RC}_{\text{total}} + \text{ASE}_{\text{baseline}} - \text{ASE}_{\text{total}} - \text{GHG}_{\text{increase}} \geq 0$$

Where:

~~(d) $\text{RC}_{\text{baseline}}$ is the **net** release of carbon under the baseline;~~

(e) RC_{total} is the **net** release of carbon under the soil emission reduction activity;

(f) $\text{ASE}_{\text{baseline}}$ is the **agricultural soil** greenhouse gas emissions from **the IPCC source category of** agricultural soils under the baseline;

(g) $\text{ASE}_{\text{total}}$ is the **agricultural soil** greenhouse gas emissions from **the IPCC source category of** agricultural soils under the soil emission reduction activity;

(h) GHG_{increase} is the increase in direct and indirect greenhouse gas emissions, which is ~~due~~ attributable to the implementation of either the carbon removal or the soil emission reduction activity.

The scope of the quantities referred to in this paragraph, points (a) to and (d), corresponds to the net greenhouse gas removals or emissions included in the scope of Regulation (EU) 2018/841, with the addition of N₂O emissions from drained organic croplands.

The scope of the quantities referred to in this paragraph, points (d) and (e), corresponds to the net greenhouse gas emissions from biogenic carbon pools as set out in points (e) and (f) of Section B of Annex I to Regulation 2018/841.

The scope of the quantities referred to in this paragraph, points (f) and (g), corresponds to the **greenhouse gas** emissions from the **IPCC source reporting** category of agricultural soils.

- ~~2. In the case of carbon farming, CR_{baseline} and CR_{total} shall be understood as net greenhouse gas removals or emissions in accordance with the accounting rules laid down in Regulation (EU) 2018/841.~~
3. Quantities referred to in paragraph 1, points (a), (b) and (c), and in paragraph 1a, points (a) – (d), shall be designated with a negative sign (-) if they are net greenhouse gas removals and with a positive sign (+) if they are net greenhouse gas emissions; they shall be expressed in tonnes of carbon dioxide equivalent.
4. Carbon removals, ~~and soil emission reductions~~ **and greenhouse gas increases** shall be quantified in a relevant, conservative, accurate, complete, consistent, comparable and transparent manner.
5. The baselines shall be highly representative of the ~~correspond to the~~ standard carbon ~~removal~~-performance of comparable activities in similar social, economic, environmental ~~and technological~~ and regulatory circumstances and take into account the geographical context including local conditions ('standardised baselines').

These standardised baselines shall be established by the Commission in the certification methodologies, set out in the delegated acts adopted pursuant to Article 8. The Commission shall review and update, if appropriate, the standardised baselines in light of evolving regulatory circumstances and of the latest available scientific evidence. The updated standardised baselines shall apply only to activities starting after the entry into force of the applicable certification methodology.

6. By way of derogation from paragraph 5, where duly justified in the applicable certification methodology, including due to the lack of data, an operator shall use a the-baseline may be based-on that corresponds to the individual carbon-removal performance of that a specific activity ('activity-specific baseline').
7. The activity-specific baselines shall be periodically updated, at the beginning of each activity period, unless otherwise stated in the applicable certification methodologies, set out in the delegated acts adopted pursuant to Article 8.
8. The quantification of ~~the~~ carbon removals and soil emission reductions shall account for uncertainties in accordance with recognised statistical approaches.
9. To support the quantification of the carbon removals and the soil emission reductions generated by carbon farming, the operator or group of operators shall gather data on carbon removals and greenhouse gas emissions in a manner compatible with national greenhouse gas inventories under Regulation (EU) 2018/841 and Part 3 of Annex V to Regulation (EU) 2018/1999.

Article 5

Additionality

1. ~~Any carbon-removal~~ activity shall be additional. To that end, ~~the carbon-removal activity-it~~ shall meet both of the following criteria:
 - (a) it goes beyond Union and national statutory requirements for carbon removals at the level of an individual operator;
 - (b) it takes place due to the incentive effect of the certification.

2. Where the standardised baseline is used ~~established pursuant to Article 4(5)~~, additionality as referred to in paragraph 1 is considered to be complied with. Where the activity-specific baseline is used ~~established pursuant to Article 4(6)~~, additionality as referred to in paragraph 1, ~~points (a) and (b)~~, shall be demonstrated through specific additionality tests as set out in ~~in accordance with the applicable certification methodologies set out in the delegated acts adopted pursuant to Article 8.~~

Article 6

Long-term storage, monitoring and liability

1. An operator or group of operators shall demonstrate that a carbon removal activity ~~aims at ensuring~~ ensures the long-term storage of carbon that the carbon is stored permanently or aims to store the carbon on a over the long-term basis.
- 1a. Soil emission reduction activities shall be subject to appropriate monitoring and liability mechanisms as set out in the delegated acts adopted pursuant to Article 8.
2. For the purposes of paragraph 1, an operator or group of operators shall comply with both of the following criteria:
 - (a) they shall be subject to rules to monitor and mitigate any identified risks of release of the stored carbon occurring during the monitoring period;
 - (b) they shall be subject to appropriate liability mechanisms as set out in the delegated acts adopted pursuant to Article 8 in order to address any release of the stored carbon occurring during the monitoring period. The liability mechanisms
- 2a. The monitoring rules referred to in paragraph 2, point (a) shall:
 - (i) for permanent carbon storage, be consistent with the monitoring rules referred to set out in Articles 13 to 16 of Directive 2009/31/EC;
 - (ii) for carbon permanently chemically bound in products, be consistent with the rules concerning the requirements for considering that carbon has become permanently chemically bound adopted pursuant to Article 12(3b) of Directive 2003/87/EC;

- (iii) for carbon farming and carbon storage in long lasting products, be set out in accordance with the rules laid down in the certification methodologies set out in the delegated acts adopted pursuant to Article 8.

2b. The liability mechanisms referred to in paragraph 2, point (b), shall:

- (i) for permanent carbon storage, be consistent with the obligations referred to set out in Articles 17 and 18 of Directive 2009/31/EC;
- (ii) for carbon permanently chemically bound in products, be consistent with the rules for permanently chemically bound carbon adopted pursuant to Article 12(3b) of Directive 2003/87/EC;
- (iii) for carbon storage in long lasting products and for carbon farming, be set out and duly justified in the applicable certification methodology and may include up-front insurance, collective buffers or discounting of carbon removal units.

3. For carbon farming and carbon storage in long-lasting products, the carbon removed and subsequently stored by a carbon removal activity shall be considered released to the atmosphere at the end of the monitoring period, unless the monitoring period is prolonged.

Article 7

Sustainability

1. An ~~carbon removal~~ activity shall at least not significantly harm ~~have a neutral impact on,~~ ~~or~~ **and** may generate co-benefits for, ~~all~~ any of the following sustainability objectives:
- (a) climate change mitigation beyond the net carbon removal benefit and net soil carbon emission reduction benefit referred to in Article 4(1) and (1a);
- (b) climate change adaptation;
- (c) sustainable use and protection of water and marine resources;
- (d) transition to a **resource efficient and** circular economy;
- (e) pollution prevention and control;

- (f) protection and restoration of biodiversity and ecosystems, including soil health and fertility, as well as avoidance of land degradation.
2. For the purposes of paragraph 1 of this Article, an ~~carbon removal~~ activity shall comply with minimum sustainability requirements laid down in the certification methodologies, set out in the delegated acts adopted pursuant to Article 8. The sustainability requirements shall be in line with relevant Union legislation.
3. Where an operator or group of operators reports co-benefits that contribute to the sustainability objectives referred to in paragraph 1 of this Article beyond the minimum sustainability requirements referred to in paragraph 2 of this Article, they shall comply with the certification methodologies set out in the delegated acts adopted pursuant ~~referred~~ to in Article 8. The certification methodologies shall incentivise as much as possible the generation of co-benefits going beyond the minimum sustainability requirements, in particular for the objective referred to in paragraph 1, point (f) of this Article.

Article 8

Certification methodologies

1. An operator or a group of operators shall apply the relevant certification methodology ~~methodologies~~ to comply with the criteria laid down in Articles 4 to 7.
2. ~~After consulting the Expert Group on Carbon Removals,~~ The Commission is empowered to adopt delegated acts in accordance with Article 16 to supplement this Regulation by establishing the ~~technical~~ certification methodologies referred to in paragraph 1 of this Article for activities related to permanent carbon storage, carbon farming and carbon storage in products. Those certification methodologies shall specify, for each activity, ~~include at least~~ the elements set out in Annex I.
- 2a. Delegated acts adopted pursuant to paragraph 2 shall differentiate between activities related to permanent carbon storage, carbon farming and carbon storage in products and further differentiate the activities on the basis of their characteristics.

Those methodologies shall ensure the robustness and transparency of carbon removals and soil emission reductions, promote the protection and restoration of ecosystems and contribute to ensuring food security and the competitiveness of farmers and foresters in the Union in a sustainable manner. They shall promote the sustainability of biomass in accordance with the sustainability and GHG saving criteria for **biofuels, bioliquids and biomass fuels** laid down in Article 29 of Directive (EU) 2018/2001 and the cascading use of biomass as laid down in Article 3(3) of [Directive REDIII].

Those methodologies shall minimise administrative burden for operators, particularly for small-scale [carbon farming] operators.

3. When preparing the ~~these~~ delegated acts referred to in paragraph 2, the Commission shall take into account ~~the following elements~~:
- ~~(a) the objectives of ensuring the robustness of carbon removals and recognising the protection and restoration of ecosystems;~~
 - ~~(b) the objective of minimising administrative burden for operators, particularly for small-scale carbon farming operators;~~
 - ~~(ba) the objective of ensuring food security in a sustainable manner and reinforcing the competitiveness of farmers and foresters in the Union;~~
 - (e) — relevant Union and national law; and ÷
 - (d) — relevant Union, national and international certification methodologies and standards.

Chapter 3

CERTIFICATION

Article 9

Certification of compliance

1. To apply for a certification of compliance with this Regulation, an operator or a group of operators shall submit an application to a certification scheme. Upon acceptance of that application, the operator or a group of operators shall submit to a certification body an ~~carbon removal~~ activity plan ~~comprehensive description of the carbon removal activity, including evidence of the certification methodology applied to assess compliance with Articles 4 to 7, a monitoring plan, an assessment of the risk of reversal of the stored carbon~~ and the expected total carbon removals and net carbon removal benefit or the net soil emission reduction benefit generated by the ~~carbon removal~~ activity, and a monitoring plan. Groups of operators shall also specify how advisory services ~~on carbon removal activities~~ are provided, in particular to small-scale carbon farming operators.
2. The certification body shall conduct a certification audit to verify the information submitted in accordance with paragraph 1 of this Article and to confirm compliance of the ~~carbon removal~~ activity with Articles 4 to 7. As a result of that certification audit, the certification body shall issue a certification audit report, that includes a summary, and a certificate of compliance containing, as a minimum, the information set out in Annex II. The certification scheme shall review ~~control~~ the certification audit report and the certificate, and make the summary of the certification audit report and the certificate of compliance publicly available in a the certification registry or, as appropriate, in the Union registry, referred to in Article 12.

3. The certification body shall carry out ~~periodic~~ regular re-certification audits to reconfirm compliance of the ~~carbon-removal~~ activity with Articles 4 to 7 and verify the generated carbon benefit. The frequency of re-certification audits shall be carried out at least every five years, unless otherwise specified set out in the applicable certification methodology, depending on the characteristics of the relevant ~~carbon-removal~~ activity. As a result of that re-certification audit, the certification body shall issue a re-certification audit report that includes a summary, and an updated certificate. The certification scheme shall review ~~control~~ the re-certification audit report and the updated certificate, and make the summary of the re-certification audit report, the updated certificate and the certified ~~carbon-removal~~ units publicly available in a the certification registry or, as appropriate, in the Union registry, referred to in Article 12.
4. The operator or a group of operators shall support the certification body during certification, and re-certification audits, notably by giving access to the activity premises and providing relevant data and documentation.
5. The Commission ~~may~~ shall adopt implementing acts to set out the structure, format, technical details of the ~~carbon-removal~~ activity plan ~~comprehensive description of the ~~carbon-removal~~ activity~~ referred to in paragraph 1, and of the certification and re-certification audit reports referred to in paragraphs 2 and 3. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17.

Article 10

Certification bodies

1. Certification bodies appointed by certification schemes shall be accredited by a national accreditation ~~authority~~ body pursuant to Regulation (EC) No 765/2008 ~~of the European Parliament and of the Council~~²⁰ or recognised by a national competent authority to cover the scope of this Regulation or the specific scope of the certification scheme.

²⁰ — ~~Regulation (EC) No 765/2008 of the European Parliament and of the Council of 9 July 2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products and repealing Regulation (EEC) No 339/93 (OJ L 218, 13.8.2008, p. 30).~~

2. Certification bodies shall be:
- (a) competent to carry out the certification and re-certification audits referred to in Article 9; and
 - (b) independent ~~from~~ of the operators or ~~from a~~ groups of operators, and carry out the activities required under this Regulation in the public interest.
3. For the purpose of paragraph 2, point (b), certification bodies or any part thereof shall not:
- (a) be an operator or a group of operators, the owner of an operator or of a group of operators, or be owned by them;
 - (b) have relations with operators or with a group of operators, that could affect their independence and impartiality.
4. Member States shall supervise the operation of certification bodies. Certification bodies shall submit, upon request by the national competent authorities, all relevant information necessary to supervise their operation, including date, time and location of the audits referred to in Article 9. Where Member States find issues of non-conformity, they shall inform the certification body and the relevant certification scheme thereof without delay.

Chapter 4

CERTIFICATION SCHEMES

Article 11

Operation of certification schemes

1. To demonstrate compliance with this Regulation an operator or a group of operators shall use a certification scheme recognised by the Commission pursuant to Article 13.

2. 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, development and management of registries.
3. Certification schemes shall verify if the information and data submitted by the operator or a group of operators for the certification of compliance pursuant to Article 9 were subject to independent auditing and if the certification of compliance was carried out in an accurate, reliable, and cost-effective manner.
4. Certification schemes shall publish, at least annually, a list of the appointed certification bodies, stating for each certification body by which national accreditation authority body it was accredited or by which ~~entity or~~ national competent public authority it was recognised and which ~~entity or~~ national competent public authority is monitoring it.
5. The Commission shall adopt implementing acts setting out the structure, format, technical details and process referred to in paragraphs 2, 3 and 4 of this Article, which shall apply to all certification schemes. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17.

Article 12

Registries

- 1a. By...[OJ: 4 years after the entry into force of this Regulation], the Commission shall establish a common Union-wide registry ('Union registry'), taking into account the reports referred to in Article 30 (5a) of Directive 2003/87/EC and Article 17 (3) of Regulation (EU) 2018/841. It shall use automated systems, including electronic templates, to make publicly accessible the information related to the certification process, including the certificates and updated certificates, and to enable the tracing of the quantity of certified units.**

-1b. The Commission shall adopt delegated acts laying down all necessary requirements concerning the Union Registry, including, if appropriate, a proportionate contribution from users to its financing and management.

1. ~~Until the establishment of the Union registry as referred to in paragraph 1b,~~ a certification scheme shall establish and duly maintain a public certification registry to make publicly accessible the information ~~related to~~ resulting from the certification process, including the certificates and updated certificates, and to enable the tracing of the quantity of carbon removal units certified in accordance with Article 9 ('certification registry'). ~~Those registries~~ 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. **A certification registry shall distinguish between different types of certified units.**

~~1a. Taking into account the reports referred to in Article 30 (5a) of Directive 2003/87/EC and Article 17 (3) of Regulation (EU) 2018/841, the Commission shall carry out an assessment of the options for the establishment of a common Union-wide registry ('Union registry') that uses automated systems, including electronic templates, to make publicly accessible the information related to the certification process, including the certificates and updated certificates, and to enable the tracing of the quantity of carbon removal units certified in accordance with Article 9 of this Article, and present, if appropriate, a legislative proposal.~~

2. The Commission ~~may~~ shall adopt implementing acts setting out the structure, format, and technical details of the public certification registries ~~and, as appropriate, the Union registry~~ and of the recording, holding or use of carbon removal-certified units, as referred to in paragraph 1 of this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17.

2a. For carbon farming and carbon storage in long-lasting products, carbon removal units shall expire at the end of the monitoring period of the relevant activity, and be cancelled from the certification registry or, as appropriate, the Union registry, unless the long-term storage of the removed carbon is proven through continued monitoring, according to the rules set out in the applicable certification methodology.

Article 13

Recognition of certification schemes

1. Only a certification scheme recognised by the Commission by means of a decision may be used by operators or groups of operators to demonstrate compliance with this Regulation. Such decision shall be valid for a period of no more than 5 years.
2. A Member State shall notify to the Commission the application for recognition of the public certification scheme. The legal representative of a private certification scheme shall notify to the Commission the application for recognition of the private certification scheme.
3. The Commission may repeal a decision recognising a certification scheme pursuant to paragraph 1 of this Article where the certification scheme fails to implement the standards and rules set out in the implementing acts referred to in Article 11(5). Where a Member State raises concerns that a certification scheme does not operate in accordance with the standards and rules set out in the implementing acts referred to in Article 11(5) that constitute the basis for decisions under paragraph 1 of this Article, the Commission shall, within 3 months of the notification, investigate the matter and take appropriate action, including repealing the relevant decision.
4. The Commission ~~may~~ shall adopt ~~implementing acts~~ guidance setting out the structure, format, and technical details of the notification and recognition processes referred to in paragraphs 1 and 2 ~~of this Article~~. ~~Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17.~~

Article 14

Reporting requirements

1. Each certification scheme recognised by the Commission shall submit to the Commission an annual report about its operations, including a description of any cases of fraud and related remediation measures. The report shall be submitted annually by 30 April, covering the preceding calendar year. The requirement to submit a report shall apply only to certification schemes that have operated for at least 12 months.

2. The Commission shall make those reports publicly available, in full or, where necessary to preserve the confidentiality of commercially sensitive information, in an aggregated form.
3. The Commission ~~may~~ shall adopt implementing acts setting out the structure, format, and technical details of the reports referred to in paragraph 1 of this Article. Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 17.

Chapter 5

FINAL PROVISIONS

Article 15

Amendment to Annexes ~~H~~

1. The Commission is empowered to adopt delegated acts in accordance with Article 16 to amend Annex I in order to adapt it to new and emerging types of activities, and to scientific and technical progress.
2. The Commission is empowered to adopt delegated acts in accordance with Article 16 to amend Annex II in order to adapt the list of minimum information included in the certificates referred to in Article 9 to technical **progress** changes in the database.

Article 16

Exercise of delegation

1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.
2. The power to adopt delegated acts referred to in Articles 8 and 15 shall be conferred on the Commission for an indeterminate period of time from [PO QJ: ~~please insert the date~~ = the date of entry into force of this Regulation].

3. The delegation of power referred to in Articles 8 and 15 may be revoked at any time by the European Parliament or by the Council. A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the *Official Journal of the European Union* or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.
4. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Inter-institutional Agreement of 13 April 2016 on Better Law-Making.
- 4a. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.
5. Delegated acts adopted pursuant to Articles 8 and 15 shall enter into force only if no objection has been expressed either by the European Parliament or the Council within a period of 2 months of notification of that act to the European Parliament and to the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the Commission that they will not object. That period shall be extended by 2 months at the initiative of the European Parliament or of the Council.

Article 17

Committee procedure

1. The Commission shall be assisted by the Climate Change Committee established by Article 44 ~~paragraph~~ (1), point (a~~±~~) of Regulation (EU) 2018/1999. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.
2. Where reference is made to this Article, Article 5 of Regulation (EU) No 182/2011 shall apply.

Article 18

Review

1. This Regulation shall be kept under review in all aspects, taking into account the relevant developments concerning Union legislation, its coherence with Directive 2003/87/EC and Directive (EU) 2018/2001, the United Nations Framework Convention on Climate Change and the Paris Agreement, technological and scientific progress, market developments in the field of carbon removals, the environmental impacts of increased biomass use resulting from this Regulation, including impacts on land degradation and ecosystem restoration, and Union food security.
2. Three years after ~~...~~**[OJ: date of the entry into force of this Regulation]** and ~~not later than~~ by ~~the end of~~ **31 December** 2028, and subsequently within six months after the outcome of each global stocktake agreed under Article 14 of the Paris Agreement, the Commission shall report to the European Parliament and to the Council on the implementation of this Regulation.

Article 19

Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at ~~Brussels~~,

For the European Parliament

The President

[...]

For the Council

The President

[...]

ANNEX I

Elements of the certification methodologies referred to in Article 8

When adopting delegated acts pursuant to Article 8, the certification methodologies shall include ~~at least~~ the following elements, taking into consideration the specificities for different activities:

- (a) description of the ~~carbon removal~~ activity covered, including its activity- and monitoring periods;
- (b) rules for identifying all carbon removal sinks and GHG emission sources referred to in Article 4(1) and (1a);
- (c) rules for calculating ~~the carbon removals under~~ and updating the baseline referred to in Article 4(1), point (a), or in Article 4(1a), point (a);
- (d) rules for calculating the total carbon removals referred to in Article 4(1), point (b) or in Article 4(1a), point (b);
- (da) rules for calculating the release of soil carbon and the emissions from agricultural soils under the baseline, referred to in Article 4(1a), points (ed) and (f);
- (db) rules for calculating the total release of soil carbon and the emissions from agricultural soils, referred to in Article 4(1a), points ~~(d-e)~~ and (g);
- (e) rules for calculating the increase in direct and indirect greenhouse gas emissions referred to in Article 4(1), point (c), and in Article 4(1a), points ~~(e-c)~~ and (h);
- (ea) rules for calculating and updating the activity-specific baseline referred to in Article 4(6);
- (f) rules to address uncertainties in the quantification of carbon removals referred to in Article 4(8);
- (g) rules to carry out the specific additionality tests referred to in Article 5(2);
- (h) rules on ~~the assessment~~, monitoring and mitigation of any risk of release of the stored carbon referred to in Article 6(2), point (a);
- (i) rules on appropriate liability mechanisms referred to in Article 6(2), point (b), and Article 6(2b);

- (ia) rules for operationalising the long-term storage requirement for certified ~~carbon~~ ~~removal~~ units generated from carbon farming and carbon storage in products referred to in Article 6(3);
- (j) rules on the minimum sustainability requirements referred to in Article 7(2);
- (k) rules on the monitoring and reporting of the co-benefits referred to in Article 7(3).

ANNEX II

Minimum information included in the certificate referred to in Article 9

The certificate shall include the following minimum information:

- (a) name and type of the ~~carbon-removal~~ activity, including the name and contact details of the operator or group of operators;
- (b) the location of the ~~carbon-removal~~ activity, including geographically explicit location of the activity boundaries, respecting 1:5000 mapping scale requirements for the Member State;
- (c) duration of the activity, including start date and end date of the carbon-removal activity (activity period);
- (d) name of the certification scheme;
- (e) name and address and logo of the certification body ~~and logo~~;
- (f) ~~(unique)-~~certificate number or code;
- (g) place and date of issuance of the certificate and validity of the certificate;
- (h) reference to the applicable certification methodology referred to in Article 8;
- (i) net carbon removal benefit or soil emission reduction benefit referred to in Article 4(1) or in Article 4(1a);
- (j) carbon removals under the baseline referred to in Article 4(1), point (a), or in Article 4(1a), point (a);
- (k) total carbon removals referred to in Article 4(1), point (b), or in Article 4(1a), point (b);
- (l) increase in direct and indirect greenhouse gas emissions referred to in Article 4(1), point (c);
- (m) breakdown by gases, sources, carbon sinks and stocks with regard to the information referred to in points (j), (k) and (l) ~~of this Annex~~;
- (n) duration of the monitoring period of the ~~carbon-removal~~ activity;

(na) amount of biomass used and proof of compliance with the minimum sustainability requirements referred to in Article 7(2);

- (o) any sustainability co-benefits referred to in Article 7(3);
 - (p) reference to any other carbon removal certification and any other international or national carbon certification including the unique certification number or code;
 - (q) type of liability mechanism;
 - (r) quantity of certified ~~carbon removal~~ units.
-