**Follow up to the European Parliament non-legislative resolution on Sustainable Carbon Cycles**

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2. **Reference numbers:** 2022/2053 (INI) / [A9-0066/2023](https://www.europarl.europa.eu/doceo/document/A-9-2023-0066_EN.html) / P9\_TA(2023)0104
3. **Date of adoption of the resolution:** 18 April 2023
4. **Competent Parliamentary Committee:** Environment, Public Health and Food Safety Committee (ENVI)
5. **Brief analysis/ assessment of the resolution and requests made in it:**

The European Parliament’s resolution notes that enhancing carbon removal is necessary to achieve the objectives of the European Climate Law, although a drastic reduction in the EU’s reliance on fossil fuels remains the priority. It insists that removals should be counted towards a separate removal target to ensure they do not slow down economy-wide decarbonisation efforts. The European Parliament acknowledges the diversity of approaches to remove carbon from the atmosphere and recognises that different carbon cycles react differently and should therefore be treated separately. It calls on the Commission to define a list of carbon farming practices with the highest absorption potential as an important input for farmers and to further invest in developing accessible and affordable carbon-removal technologies.

The European Parliament emphasises carbon farming has the potential to contribute to the EU’s climate and biodiversity objectives while supporting sustainable biomass and food production. It calls on the Commission to broaden its definition of carbon farming practices to include on-farm mitigation measures in addition to on-field sequestration measures. The European Parliament recognises that carbon stocks in the soil are currently on a worrying downward trend and underlines that sustainable agriculture and forestry activities for biodiverse, resilient, and healthy ecosystems can constitute an important source of long-term removal. It calls on the Commission to devise clear safeguard policies to protect the people’s right to live in healthy environments and to revise current funding options to reward practices which have climate and environmental benefits. The European Parliament stresses that the European carbon farming business model should be realistic, proportionate to contribute to the availability of new local job opportunities, rural development and to improved social inclusion of rural areas and calls on the Commission to take into account the specific situation of young farmers and recognise the preliminary work and efforts made by the frontrunners. The European Parliament asks the Commission to make available to land managers verified emission and removal data, based on a farm level and a result-based approach, well before 2026. It calls on the Commission and the Member States to accelerate knowledge transfers and the provision of advice and technical guidance.

The European Parliament considers that technologies capturing and storing carbon that are scientifically proven and environmentally safe can play a role in achieving climate neutrality. It recognises the need for a regulatory framework and appropriate funding for the deployment of technologies and infrastructure for carbon capture, transport, storage or use to produce sustainable synthetic fuels or other non-fossil-based carbon products. It calls on the Commission to establish an efficient and reliable system for the traceability of captured CO2 and, together with Member States, to sufficiently document the long-term regional effects of geological carbon storage. The European Parliament calls on the Commission to adopt a road map, with clear steps and milestones, to develop the CO2 storage and transport infrastructure needed to meet the EU’s long-term climate target of carbon neutrality.

The European Parliament encourages the development of innovative, sustainable, circular and long-lasting bio-based carbon products and stresses the importance to build on scientific evidence and robust carbon accounting. It calls on the Commission, in cooperation with stakeholders, to come forward with concrete solutions and initiatives aimed at replacing fossil carbon with sustainable streams of recycled carbon. It invites the Commission to revise the Product Environmental Footprint (PEF) methodology.

1. **Response to requests and overview of action taken, or intended to be taken, by the Commission:**

In November 2022, the Commission adopted a proposal for a Regulation on an EU voluntary framework for the certification of carbon removals. This proposal was the most important legislative initiative announced in the Communication on Sustainable Carbon Cycles. The proposal consists of two pillars: (1) a set of QU.A.L.ITY criteria (QUantification, Additionality, Long-term storage, and sustainabil-ITY), to ensure that carbon removals are robust; and (2) rules for the certification process, to ensure that carbon removals are certified in a reliable way and fight greenwashing.

The scope of the proposed framework is limited to carbon removals. For carbon farming, it does not include the (non-CO2) emission reductions from livestock activities or fertiliser application. The proposal follows the approach of the European Climate Law to keep the incentives for non-CO2 emissions reductions separate from the net removals in the sector of land use, land-use change and forestry (LULUCF). The scope of carbon farming is therefore the same as the LULUCF scope: action to increase the net removals from land and forests. However, under the proposal (Article 7), the reduction in non-CO2 emissions generated by a carbon farming activity can be rewarded as a co-benefit. This option will increase the attractiveness of the certified carbon removal units and therefore give more economic value to them. If, on the other hand, non-CO2 emissions increase because of a carbon farming activity, such emissions shall be subtracted from the amount of carbon removals that can be certified (**paragraph 17**).

The certification methodologies will be developed with an objective of recognising the protection and restoration of ecosystems (as per Article 8(3)a of the proposal), including the preservation of healthy ecosystems (**paragraph 8**). All direct and indirect emissions from the implementation of carbon removal activities, such as emissions from the use of fertilizers and from indirect land use change, shall be considered in the calculation of the net carbon removal benefit of a carbon removal activity (**paragraph 14**).

The Commission set up an Expert Group on carbon removals in January 2023 to assist it in the preparation and implementation of policy initiatives in the field of carbon removals, including the development of certification methodologies. By facilitating an exchange of experiences and good practices from existing public and private carbon removal initiatives through the Expert Group, the Commission will bring together and make public the knowledge about the activities with the highest absorption potential and about the best practices to certify and verify emission and removal data from these activities (**paragraph 3**). The work of the Expert Group will guide any future implementing legislation on the certification methodologies under the EU certification framework for carbon removals.

The data and information collected at the farm level for the certification of carbon farming activities will help farmers and forest owners to have a clearer understanding of their business opportunities and will help policy makers to better design future public support schemes through, for instance, the Common Agricultural Policy or other initiatives stemming from the upcoming proposal on sustainable food systems (**paragraph 23**).

Many carbon farming activities, such as agroforestry and rewetting of peatlands, can have positive impacts on both climate and environmental objectives. The Commission will prioritise the development of tailored certification methodologies on carbon farming activities that provide significant co-benefits for the environment. In addition, the certification methodologies shall incentivise as much as possible the generation of co-benefits going beyond the minimum sustainability requirements, especially as regards biodiversity and ecosystems. These additional co-benefits will give more economic value to the certified carbon removals, result in higher revenues for the operators and be more attractive for investors (**paragraph 22**).

Socio-economic objectives such as rural development and the specific situation of young farmers are addressed through other policies, notably the Common Agricultural Policy (CAP), but also the Just Transition Fund, regional funds, etc. In general, carbon farming practices can contribute to better food security and create a complementary source of revenues also for young farmers. The planned review of the implementation of the Regulation will look, among other things, at market developments in the field of carbon removals and Union food security (**paragraph 19**).

Investments in the development of carbon farming practices and carbon removal technologies come from several EU instruments, such as Horizon Europe (in particular the Soil Mission), the LIFE programme, the Just Transition Funds and regional funds, and the Innovation Fund (**paragraphs 3 and 40**). Under the Soil Mission, three projects related to carbon farming have been selected to jointly receive EUR 17M of EU funding (two projects on monitoring, reporting and verification of soil carbon and greenhouse gases balance, and one to create a network on carbon farming for agricultural and forest soils), and another call for applications is included in in the 2023 Mission Work Programme (Carbon farming in living labs). In the annual calls for LIFE Standard Action Projects, the “Development of a business model to remunerate individual actors for the result of climate-friendly land management practices” is regularly encouraged in order to finance pilot projects for carbon farming, which results in several carbon farming projects already concluded, ongoing or under evaluation.

Under the Common Agricultural Policy, the Member State have the opportunity to give farmers access to advisory services which can help facilitating their participation to carbon farming schemes. Member States must ensure through the Agricultural Knowledge and Innovation Systems (AKIS) advice and knowledge transfer on a broad number of domains, including environmental ones which may serve for the purpose of carbon farming. The Farm Sustainability Tool (FaST), for nutrient is an integral part of the AKIS and can be the basis for the development of farm calculators (**paragraph 44**).

The ocean carbon cycle plays a crucial role in regulating the Earth's climate, and an accurate understanding of the carbon cycle is vital for effective climate and conservation policies. Through its funding programmes and its past and ongoing EU-funded research projects (e.g. EU4OceanObs), the European Union supports and funds Ocean carbon research, as recently signalled by the hosting of a three-day working group on Integrated Ocean Carbon Research co-sponsored by the Intergovernmental Oceanographic Commission (IOC) of UNESCO (**paragraph 24**).

In March 2023, the Commission adopted a proposal on establishing a framework of measures for strengthening Europe’s net-zero technology products manufacturing ecosystem (Net Zero Industry Act) to make sure the Union is well-equipped for the clean-energy transition. This proposal sets an EU objective to reach an annual 50Mt injection capacity in strategic CO2 storage sites in the EU by 2030, with proportional contributions from EU oil and gas producers. This will remove a major barrier to developing CO2 capture and storage as an economically viable climate solution, in particular for hard to abate energy-intensive sectors. It also sets obligations to publish all geological data relating to oil and gas production sites that will provide data and information to better understand the long-term effects of geological carbon storage and better assess the overall potential impact before the deployment of large-scale geological storage capacity (**paragraphs 31 and 32**).

Furthermore, the Commission is preparing a Communication on an industrial carbon management strategy for the European Union. The Commission will identify the regulatory needs for emerging CO2 transport and storage infrastructure, including third-party access, CO2 quality standards, regulatory oversight and long-term infrastructure planning. Building on stakeholder input from the Carbon Capture, Utilisation and Storage Forum (CCUS Forum), it will also explore other potential measures that could facilitate the deployment of industrial carbon management in Europe. The Commission will consider setting out in this Communication a comprehensive action plan for carbon capture and storage (CCS), capture and use (CCU) and carbon removal activities with quantifiable and verifiable milestones looking towards 2050 (**paragraphs 9, 15, 30 and 32**).

The European Union is also very active in working together with industries and other stakeholder through projects to support sustainable alternatives to fossil sources of carbon and the circularity of carbon in the EU economy. The Horizon Europe work programme for Cluster 5 on Climate, Energy and Mobility offers to finance projects dedicated to carbon capture, use and storage with an indicative budget of EUR 89 million for the period 2021-2024. The Circular Bio-based Europe Joint Undertaking is a EUR 2 billion partnership between the European Union and the Bio-based Industries Consortium (BIC) that funds projects advancing competitive circular bio-based industries under Horizon Europe. Since 2021, the two first large-scale calls of the Innovation Fund have granted about EUR 3 billion to first-of-a-kind clean tech projects with a significant share of this fund supporting investments into carbon capture, storage, use or transport. The third large-scale call, which has been closed in March 2023, will disburse an additional budget of EUR 3 billion (**paragraphs 9 and 15**).

In December 2021, the Commission adopted the Recommendation ((EU) 2021/2279) on the use of the Environmental Footprint methods to measure and communicate the life cycle environmental performance of products and organisations. This recommendation takes a simplified approach to carbon modelling providing the correct final carbon balance results, including carbon uptake from atmosphere and carbon release at end of life, also to ease the burden of modelling, which is especially relevant for SMEs in the agri-food sector. However, the approach does not enable the transparent tracking of carbon uptake and releases at all stages of the life cycle of a product. Therefore, the Commission is currently evaluating options of a carbon modelling approach that is transparent but at the same time does not lead to potentially misleading results in case only parts of the life cycle are included in the calculations, e.g., when the end-of-life stage is neglected. The Commission's Joint Research Centre (JRC) has been charged with leading those efforts (**paragraph** **15**).