



2022/2053(INI)

27.10.2022

OPINION

of the Committee on Industry, Research and Energy

for the Committee on the Environment, Public Health and Food Safety

on sustainable carbon cycles
(2022/2053(INI))

Rapporteur for opinion (*): Seán Kelly

(*) Associated committee – Rule 57 of the Rules of Procedure

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SUGGESTIONS

The Committee on Industry, Research and Energy calls on the Committee on the Environment, Public Health and Food Safety, as the committee responsible, to incorporate the following suggestions into its motion for a resolution:

- A. whereas the European Climate Law¹ requires that greenhouse gas emissions and removals are balanced by 2050 at the latest with the aim of achieving negative emissions thereafter;
- B. whereas every tonne of fossil CO₂ that is not emitted is the best contribution to achieving climate targets; whereas the sustainable and safe development and deployment at scale of carbon removal solutions from unavoidable emissions is indispensable to climate neutrality and requires significant targeted support over the next decade for carbon capture, utilisation and storage (CCUS);
- C. whereas in order to ensure that greenhouse gas emissions and removals are balanced by 2050 at the latest, with the aim of achieving negative emissions thereafter, it will be necessary to encourage carbon capture and usage technologies, especially technologies with carbon removal capacity;
- D. whereas the EU climate neutrality objective would require the capture of between 300 and 500 Mt of CO₂ by 2050²;
- E. whereas the last Intergovernmental Panel on Climate Change (IPCC) Working Group III Contribution to the Sixth Assessment Report includes carbon capture and storage as a critical decarbonisation strategy in most mitigation pathways; whereas the IPCC Working Group III report also stresses that the deployment of carbon capture and storage is severely lagging behind the schedule required to meet the global climate mitigation targets;
- F. whereas the London Protocol prohibits the cross-border transport of CO₂ by sea; whereas the 2009 amendment addressing this restriction has only been adopted by five Member States;
- G. whereas policies should differentiate between biogenic and fossil carbon cycles; whereas fossil carbon must be reduced to close-to-zero level as soon as possible;
- H. whereas Horizon Europe will continue to foster innovative approaches, in particular through a major European research and innovation mission to promote soil health entitled 'A Soil Deal for Europe', as well as through its thematic clusters and the European Innovation Council (EIC);

¹ 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).

² Commission staff working document of 15 December 2021 entitled 'Sustainable carbon cycles for a 2050 climate-neutral EU – Technical Assessment' (SWD(2021)0451).

1. Welcomes the Commission communication of 15 December 2021 on sustainable carbon cycles (COM(2021)0800);
2. Recalls that the European Climate Law sets the goal of net-zero emissions by 2050 at the latest and recognises the need to drastically reduce fossil carbon reliance starting this decade and envisages new business models for carbon farming; recalls the importance of tackling carbon embedded in products;
3. Supports the Commission's approach on carbon removals before 2030 and the improvement in climate accounting by 2028;
4. Reiterates the role of Horizon Europe missions and the EIC in fostering research into new breakthrough technologies and game-changing innovations, while ensuring the protection of the environment and of high levels of human health, including research into capture, transport, storing or reusing technologies, as well as technical and nature-based carbon removal and storage opportunities; supports the EIC Accelerator Challenge 'Technologies for "Fit for 55"' for the development and scaling up of sustainable agriculture in order to increase climate resilience, abate nitrogen and methane emissions, and increase carbon stock in the soil;
5. Insists on the fostering of innovative solutions to achieve the Green Deal commitments on climate, biodiversity and zero pollution, and asks that research activities be focused on supporting rural areas and fair access to healthy food; encourages the Commission and the Member States to ensure cross-disciplinary cooperation between national and regional research institutions, scientists, farmers and small and medium-sized enterprises, which is aimed at achieve sustainable food and farming systems;
6. Considers that carbon capture and storage can play a role in capturing and safely and permanently storing unavoidable emissions where no direct emissions reduction options are available; supports the increased size of the Innovation Fund for the deployment at scale of innovative zero- and low-carbon technologies to support industrial carbon removal and the possibility of carbon contracts for difference (CCfD) as a means of investment in innovative clean technologies, as well as in carbon removal and storage opportunities; calls on the Commission to better support industrial carbon removals with the Innovation Fund;
7. Stresses that carbon removals are part of the solution to climate change but should not substitute actions to reduce emissions, and notes that carbon sinks must also be increased in addition to emission reductions; highlights the need to recycle carbon from waste streams, from sustainable sources of biomass or directly from the atmosphere; recognises the role of bioenergy with carbon capture and storage (BECCS) in achieving the EU's climate goals by removing carbon from the atmosphere; calls on the Commission to better support the use of carbon from recycling and biogenic origin;
8. Emphasises that many products in circulation when taken together represent a major reservoir of carbon that is often released at the end-of-life phase; calls on the Commission to support the industrial scaling up of the initiatives aimed at gradually replacing fossil carbon with sustainable streams of renewable and recycled carbon through financial support and regulation; welcomes the aspirational 20 % target for plastics and chemicals coming from non-fossil carbon; emphasises that this target can

only be achieved if EU legislation creates a supportive framework by differentiating on the basis of the origin of the carbon; invites the Commission to establish a methodology for calculating the share of sustainable non-fossil carbon;

9. Reiterates that progress made in one sector should not compensate for the lack of progress in other sectors; supports the further promotion, including through financial incentives, of technological solutions for carbon capture and use, and the production of sustainable synthetic fuels or other non-fossil-based carbon products; calls on the Commission, in cooperation with industry sectors and stakeholders, including civil society organisations, involved in carbon removal practices and technologies to come forward with concrete solutions and initiatives aimed at replacing fossil carbon with sustainable streams of recycled carbon;
10. Reiterates that removals of greenhouse gases by natural carbon sinks are difficult to calculate and potentially reversible, and that the risk of reversal of removals by natural carbon sinks is further aggravated by climate change;
11. Highlights the importance of European leadership and the need for a competitive CCUS market and CO₂ removals with financial incentives that support commercial deployment before 2030, underpinned by clear definitions and safeguards; further highlights the importance of energy saving and energy efficiency measures in the electrification of the EU economy and in boosting renewables;
12. Calls on the Commission to adopt a strategy for carbon capture and storage by the end of 2023, including a comprehensive plan and targets to ensure the deployment of these technologies in the time frame required for the decarbonisation of Europe; invites the Commission to develop common standards and rules for monitoring, reporting and verifying the gains or losses in carbon sequestered through a robust network for data collection, ensuring the successful upscaling of carbon farming and establishing long-term business perspectives; stresses that the Commission's upcoming proposal for the certification of carbon removals should come on top of efforts to reduce emissions and should clearly differentiate between short-cycle removal and long-term removal; stresses that there should be no fungibility between these types of removal;
13. Highlights that an important element of any policy framework for carbon removals will be the development of new CO₂ transport and storage networks and infrastructures in the EU, connecting industrial emitters with CO₂ storage capacity, in order to achieve decarbonisation of hard-to-abate sectors, as well as carbon removals in the context of BECCS and direct air capture (DAC); calls on the Commission to formulate a plan, with clear milestones, to develop the CO₂ storage and transport infrastructure needed in Europe as part of the strategy for carbon capture and storage, including the development of industrial CCUS clusters with shared CO₂ transport and storage infrastructure, providing a basis to further expand CO₂ networks consistent with net-zero pathways and aiming to support economies of scale and facilitate CO₂ capture for a larger number of smaller industrial facilities; calls on the Commission to coordinate the mapping of Member States' national storage resources and to take steps to identify commercially viable storage sites; urges the Commission to encourage Member States to ratify the amendment to the London Protocol; calls on the Commission to develop guidelines for bilateral agreements on permits for the export and import of CO₂ for storage;

14. Highlights that hard-to-abate sectors can become less dependent on fossil carbon ('defossilise') by the use of renewable carbon of biogenic origin (RCBO); supports and promotes RCBO being sustainably sourced and that it should preferably originate from biogenic waste materials; supports the use of RCBO as feedstock and not as a fuel in hard-to-abate industries;
15. Calls on the Commission to propose a framework for carbon removal, including CCUS, with clear targets, such as on the amount of CO₂ captured and stored in Europe or the overall European storage capacity, as well as with requirements on monitoring, reporting and verification based on scientific criteria, life-cycle, circular and carbon supply chain considerations, that is sufficiently flexible to accommodate new technologies, while also taking the up- and downstream emissions of a removal process into account;
16. Calls on the Commission to present short-term actions to upscale carbon farming, including 'blue carbon', as a business model that incentivises practices on natural ecosystems that increase carbon sequestration, and to foster a new industrial value chain for the sustainable capture, recycling, transport and storage of carbon.

INFORMATION ON ADOPTION IN COMMITTEE ASKED FOR OPINION

Date adopted	26.10.2022
Result of final vote	+: 43 -: 11 0: 5
Members present for the final vote	Matteo Adinolfi, Nicola Beer, François-Xavier Bellamy, Hildegard Bentele, Tom Berendsen, Vasile Blaga, Michael Bloss, Marc Botenga, Cristian-Silviu Buşoi, Jerzy Buzek, Josianne Cutajar, Nicola Danti, Marie Dauchy, Christian Ehler, Valter Flego, Niels Fuglsang, Lina Gálvez Muñoz, Jens Geier, Nicolás González Casares, Christophe Grudler, Robert Hajšel, Ivo Hristov, Romana Jerković, Eva Kaili, Seán Kelly, Łukasz Kohut, Zdzisław Krasnodębski, Miapetra Kumpula-Natri, Thierry Mariani, Marisa Matias, Georg Mayer, Marina Mesure, Dan Nica, Niklas Nienab, Ville Niinistö, Johan Nissinen, Mauri Pekkarinen, Pina Picierno, Clara Ponsatí Obiols, Manuela Ripa, Robert Roos, Sara Skyttedal, Beata Szydło, Patrizia Toia, Isabella Tovaglieri, Henna Virkkunen, Pernille Weiss
Substitutes present for the final vote	Andrus Ansip, Franc Bogovič, Pilar del Castillo Vera, Klemen Grošelj, Ladislav Ilčić, Elena Lizzi, Luděk Niedermayer, Jutta Paulus, Bronis Ropė, Jordi Solé
Substitutes under Rule 209(7) present for the final vote	Andrey Kovatchev, Aušra Maldeikienė

FINAL VOTE BY ROLL CALL IN COMMITTEE RESPONSIBLE

43	+
ECR	Ladislav Ilčić, Zdzisław Krasnodębski, Beata Szydło
ID	Matteo Adinolfi, Elena Lizzi, Georg Mayer, Isabella Tovaglieri
PPE	François-Xavier Bellamy, Hildegard Bentele, Tom Berendsen, Vasile Blaga, Franc Bogovič, Cristian-Silviu Buşoi, Jerzy Buzek, Pilar del Castillo Vera, Christian Ehler, Seán Kelly, Andrey Kovatchev, Aušra Maldeikienė, Luděk Niedermayer, Sara Skyttedal, Henna Virkkunen, Pernille Weiss
RENEW	Andrus Ansip, Nicola Beer, Nicola Danti, Valter Flego, Klemen Grošelj, Mauri Pekkarinen
S&D	Josianne Cutajar, Niels Fuglsang, Lina Gálvez Muñoz, Jens Geier, Nicolás González Casares, Robert Hajšel, Ivo Hristov, Romana Jerković, Eva Kaili, Łukasz Kohut, Miapetra Kumpula-Natri, Dan Nica, Pina Picierno, Patrizia Toia

11	-
ECR	Robert Roos
THE LEFT	Marc Botenga, Marisa Matias, Marina Mesure
VERTS/ALE	Michael Bloss, Niklas Nienaaß, Ville Niinistö, Jutta Paulus, Manuela Ripa, Bronis Ropé, Jordi Solé

5	0
ECR	Johan Nissinen
ID	Marie Dauchy, Thierry Mariani
NI	Clara Ponsatí Obiols
RENEW	Christophe Grudler

Key to symbols:

+ : in favour

- : against

0 : abstention