

Revision of the LULUCF Regulation

Strengthening the role of the land use, land-use change and forestry sector in climate action

OVERVIEW

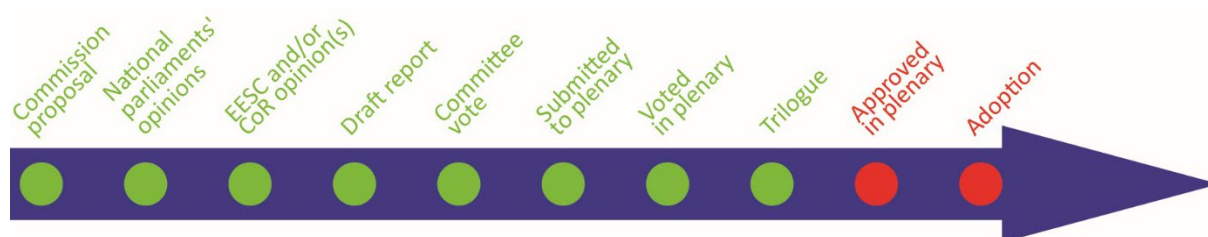
To align regulations and policies with the legally binding goals – delivering, by 2030, a 55 % net greenhouse gas emissions reduction compared to 1990, and reaching climate neutrality in Europe by 2050 – on 14 July the European Commission presented its first proposals under the 'fit for 55' package.

One of these proposals involves amending Regulation (EU) 2018/841 on emissions and removals from land use, land-use change and forestry (the LULUCF Regulation). Among the main changes envisaged are to merge, as of 2030, the LULUCF sector with the non-CO₂ agricultural sector in a new climate pillar, which would have to achieve climate neutrality by 2035. Moreover, by 2030, LULUCF carbon removals would have to increase to 310 million tonnes of CO₂ equivalent (CO₂e). For the post-2025 period, the Commission would set individual targets for each Member State.

The proposal was referred to the European Parliament's Committee on Environment, Public Health and Food Safety (ENVI), which appointed Ville Niinistö (Greens/EFA, Finland) as rapporteur. The Parliament and the Council adopted their positions in June 2022, and a trilogue agreement on the proposal was reached on 11 November 2022.

Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) 2018/841 on the inclusion of greenhouse gas emissions and removals from land use, land use change and forestry in the 2030 climate and energy framework

<i>Committee responsible:</i>	Environment, Public Health and Food Safety (ENVI)	COM(2021) 554
<i>Rapporteur:</i>	Ville Niinistö (Greens/EFA, Finland)	14.7.2021
<i>Shadow rapporteurs:</i>	Dan-Ștefan Motreanu (EPP, Romania) Delara Burkhardt (S&D, Germany) Martin Hojsík (Renew, Slovakia) Laura Huhtasaari (ID, Finland) Anna Zalewska (ECR, Poland) Marina Mesure (The Left, France)	2021/0201(COD) Ordinary legislative procedure (COD) (Parliament and Council on equal footing – formerly 'co-decision')
<i>Next steps expected:</i>	Final first-reading vote in plenary	



Introduction

The [European Green Deal](#), which seeks to make Europe the first climate-neutral continent by 2050, is one of the six political [priorities of the von der Leyen Commission](#). The [European Climate Law](#) of April 2021 made this ambition legally binding, while also increasing the greenhouse gas (GHG) emissions reduction target for 2030 from 'at least' 40 % to 'at least' 55 % net, compared to 1990.

On 14 July 2021, the European Commission published a [proposal](#) to amend [Regulation](#) (EU) 2018/841 on the inclusion of GHG emissions and removals from land use, land-use change and forestry (the LULUCF Regulation) as part of the EU's climate and energy framework. The aim of the proposed amendments is to strengthen the LULUCF sector's contribution to climate action.

One of the key differences between the EU's 2020 and 2030 emissions reduction targets is the change from a direct emissions reduction target to a net emissions target. A net target is reached by subtracting GHG removals from the total GHG emissions. Removals of GHGs or of [carbon dioxide](#) can occur through technological or nature-based solutions. All [scenarios](#) for achieving the temperature targets of the [Paris Agreement](#) rely on carbon removal solutions.

The LULUCF sector plays a key role in natural carbon removal, which is essential for balancing the remaining GHG emissions to achieve net-zero by 2050, and for achieving [negative emissions](#) from 2051. The LULUCF ecosystems provide a significant carbon sink capacity, which, however, has shrunk over the past decade. The current proposal seeks to reverse this trend and increase carbon removal.

Context

Three key pieces of climate legislation currently implement the overall European Union GHG emissions reduction target: [Directive 2003/87/EC](#) on the [EU emissions trading system](#) (the ETS Directive), Regulation (EU) 2018/842 (the [Effort-Sharing Regulation](#), ESR), and the [LULUCF Regulation](#). The LULUCF sector became a key part of the EU's regulatory framework for 2020-2030 following the adoption of the October 2014 European Council [conclusions](#), which also pointed out the need to 'ensure coherence between the EU's food security and climate change objectives'. Moreover, the [Kyoto Protocol](#), adopted in 1997, committed the EU Member States to applying the 'no-debit rule' (see box opposite). The above three acts are complemented by others, including on [renewable energy](#) and [energy efficiency](#), and by CO₂ standards for [new cars and vans](#) and for [heavy duty vehicles](#).

The existing legislative framework for ensuring the achievement of the EU's [2030 climate and energy targets](#), which also includes the [Governance Regulation](#) ((EU) 2018/1999 laying out the rules for planning, reporting and monitoring progress to align to the 2030 targets), is not sufficient to achieve the increased 2030 ambition. A 2019 [progress report](#) estimated that full implementation of all relevant EU law provisions could lead to a 45 % reduction of GHG emissions by 2030 in the EU-28. The European Climate Law made initial amendments to the provisions in the Governance Regulation.

The 'no-debit' rule explained

For the period between the Kyoto Protocol's adoption in 1997 and 2020, the LULUCF sector was obliged to ensure that GHG emissions from within the sector did not surpass the sector's sink capacity for removals (the no-debit rule).

The 2018 LULUCF Regulation carried this rule forward.

Should a Member State's accounted emissions within LULUCF exceed the sector's accounted removals, the Member State would need to increase the sink capacity within LULUCF – for example, by planting trees or potentially by making emissions credits transfers using flexibility mechanisms.

Existing situation

The [LULUCF Regulation](#) requires that all Member States adhere to the 'no-debit' rule over two five-year periods, and envisages efforts to increase the LULUCF carbon sink from 2030 onwards. It introduces accounting obligations for all types of land use from 2021 onwards; for wetlands, these obligations arise from 2026 onwards. Non-CO₂ emissions from the agricultural sector's land-use practices are covered by the provisions of the ESR, while CO₂ emissions or removals on agricultural lands are reported under the relevant LULUCF land category.

Considering the long time it takes for the effects of mitigation actions under LULUCF to materialise, a standard transition period of 20 years applies to areas converted by means of deforestation or afforestation. The regulation ensures consistency with categories and reporting requirements under the United Nations Framework Convention on Climate Change (UNFCCC) and overall with the guidelines provided by the Intergovernmental Panel on Climate Change (IPCC).

For managed forest land, Member States are obliged to account for changes in projected emissions or removals using the forest reference level¹ (FRL) benchmark. The FRL for each Member State was set in a [delegated act](#) in October 2020, preceded by a two-year process involving the submission of draft national forestry accounting plans (including proposed FRLs) by Member States; a consultation with experts; and a series of technical recommendations and reviews. In calculating the developments in respect of net emissions or removals compared to the FRL, Member States are obliged to report on harvested biomass, depending on the type. For harvested wood products (HWP) the carbon storage period can vary according to the type (primarily paper, wood panels or sawn wood), whereas biomass for energy or designated as solid waste assumes immediate emissions. Annex V to the regulation provides methodological guidance in reporting carbon storage in harvested biomass.

There is flexibility between the ESR (Article 7) and the LULUCF Regulation (Article 12) to allow for the limited transfer of removal credits (LULUCF) or emissions allocations (ESR), the aim being to ensure compliance across the legislative framework. Member States can also choose to bank LULUCF credits from the first accounting period (2021-2025) towards the second accounting period (2026-2030) or transfer them to another Member State.

According to the latest data, 2019 net removals from LULUCF stood at 249 million tonnes of CO₂ equivalent (MtCO₂e) in the EU-27. Net emissions were reported from cropland, grassland, wetlands, settlements and other land, while forest land and harvested wood products delivered net removals outweighing the above categories' emissions.

In the 2013-2019 period, net LULUCF removals [declined](#) by over a fifth, from 322 to 249 MtCO₂e. Reasons include increased harvesting rates, ageing forests and natural disturbances such as forest fires or bark beetle damage. According to projections in the [impact assessment](#) accompanying the climate target plan [communication](#), removals will further decrease to 225 MtCO₂e by 2030 under the current no debit approach.

Parliament's starting position

The European Parliament [called](#) for a mid-century zero-emissions strategy back in 2017, and has maintained pressure to increase climate ambitions and legislative frameworks through various resolutions. In its March 2019 [resolution](#), the Parliament welcomed the Commission's November 2018 strategy – [A clean planet for all](#) – which sets out a vision of net-zero GHG emissions by 2050. The Parliament however stressed the need to prioritise direct emissions reductions and actions conserving and enhancing the EU's natural sinks and reservoirs, rather than rely on carbon removal technologies. During the 2018 trilogue negotiations on the climate and energy legislative framework, the Parliament [backed](#) reduced emissions allocations under the Effort-sharing Regulation, which includes agriculture, while also bolstering the LULUCF Regulation provisions by adding that from 2030, they should go beyond the 'no-debit' rule.

In its 15 January 2020 [resolution](#) on the European Green Deal, the Parliament asked the Commission to increase the emissions reduction target for 2030 and to ensure legally binding targets for 2030 and 2040, by including these in the proposal on the European Climate Law. Within the same resolution, the Parliament reiterated the importance of sustainable agricultural practices, including through agro-forestry, in contributing to the EU climate objectives. These practices include sustainable forest management and carbon capture, which would also provide other significant ecosystem services beneficial to the environment and biodiversity.

In its October 2020 [resolution on deforestation](#), the Parliament requested the Commission to propose an EU legal framework to halt and reverse EU-driven global deforestation. Stressing the need for a legal framework, the Parliament pointed out that emissions from land-use change, mostly due to deforestation, are the second biggest cause of climate change after the burning of coal, oil and gas. It also highlighted that forests, in particular primary forests, are significant natural carbon sinks and are indispensable in the fight against climate change in line with the Paris Agreement's goals. In June 2021, the Parliament adopted its [resolution](#) on the EU biodiversity strategy for 2030, recounting the importance of forests for ecosystem services and biodiversity, while also noting the sustainable economic potential of a circular bioeconomy. The Parliament called for a moratorium on logging of primary and old-growth forests and reiterated the need to harmonise datasets and utilise digitalisation and big data to ensure adequate environmental and biodiversity protection.

During the trilogue negotiations on the proposal for the European Climate Law, the Parliament and the Council [achieved](#) consensus on limiting the contribution of removals towards the 2030 target to 225 Mt CO₂e, in order to maximise direct emissions reductions. The Parliament further received the Commission's confirmation that the proposal on the revision of the LULUCF Regulation would aim to increase net carbon removals to levels above 300 Mt CO₂e in the LULUCF sector by 2030, to de facto achieve a 57 % net reduction of emissions by 2030.

Council and European Council starting position

In December 2019, the European Council [endorsed](#) the 2050 climate-neutrality vision. A year later, it [committed](#) to increasing the 2030 target to 55 % net emission reductions compared to 1990, and submitted this position as the [EU's nationally determined contribution](#) under the Paris Agreement.

Preparation of the proposal

The adoption of the European Climate Law made the European Green Deal vision of climate neutrality by 2050 legally binding, thus placing the requirement on EU policies and sectors to contribute to its achievement. As, according to the Green Deal communication, existing policies would only reduce GHG emissions by 60 % by 2050, the Commission [climate target plan](#) of September 2020 proposed to raise the 2030 ambition from 40 % to 55 %, to ensure a pathway compatible with 2050 climate neutrality. The plan was accompanied by an [impact assessment](#), of which EPRS made an [initial appraisal](#). The [Commission work programme 2021](#) subsequently announced an overhaul of the entire existing policy framework, along with new initiatives through a ['fit for 55'](#) package.

In the autumn of 2020, the Commission provided a one-month feedback period on its inception impact assessment on the revision of the LULUCF Regulation, followed by a three-month [public consultation](#) aimed at gathering input from stakeholders. The final proposal is accompanied by an [impact assessment](#); an EPRS [initial appraisal](#) of the Commission's impact assessment is available.

The Commission's Regulatory Scrutiny Board (RSB) filed its [opinion](#) on the impact assessment for the revision in April 2021. The RSB noted significant shortcomings but gave a positive opinion on condition that the following main points be addressed: the insufficient justification for the choice of preferred option, especially as regards the need for a 2035 target at this point; and a lack of information on the preferred option's impacts, specifically regarding its costs and benefits and the related stakeholder views.

The changes the proposal would bring

The proposal suggests significant innovation and restructuring between the current framework pillars, towards a policy focused on increasing the carbon sink potential of land use and forestry. The majority of the proposed changes would take effect from 2026. The Commission proposal sets three specific objectives, which the amendments will seek to achieve.

Objective 1: A climate-neutral land sector by 2035

The Commission proposes expanding the LULUCF Regulation to include, starting from 2031, non-CO₂ emissions² from the agricultural sector. Establishing this new 'land sector' pillar within climate policy should ensure a holistic and strategic view on the role of land use in EU. Addressing the RSB concerns, the Commission offers the following arguments as justification for setting a joint 2035 climate-neutrality target for agriculture, forestry and land use (AFOLU) at this stage: long lead times in nature-based actions; the need for planning certainty; and the need to set a clear long-term policy direction for the 2028-2035 common agricultural policy.

Increasing LULUCF net removals is a key step towards the first objective. The ambition is to **reverse the current trend of declining LULUCF net removals** and deliver, by 2030, 310 MtCO_{2e} removals. To do so, the Commission proposes amending Article 4 as follows: changing its title from 'Commitments' to 'Commitments and targets', and introducing targets within it related to each of the periods towards 2030:

- 2021 to 2025 – no-debit rule;
- 2026 to 2030 – binding minimum national 2030 net-removal targets per Member State (see table in [Annex IIa](#) to the proposal);
- 2031 to 2035 – **climate-neutrality commitment for the land sector by 2035** and negative emissions thereafter.

Member States would need to describe, in the June 2024 update to their integrated national energy and climate plans, how they plan to achieve the goal. Non-CO₂ agricultural emissions and removals are included from 2031 in the amended scope under Article 2(3). Following the 2023 global stocktaking agreed in the Paris Agreement ([Article 14](#) thereof), the Commission would, within six months, prepare a report to the European Parliament and Council, assessing the regulation in force, the impact of flexibilities and the need for further policies or measures. Subsequently, the Commission would, in 2025, propose post-2030 individual targets, subject to an impact assessment and a new legislative proposal. The new proposal would include a post-2035 framework, extending the scope of the LULUCF Regulation to include GHG emissions and removals from additional sectors, such as the marine and freshwater environment. To deliver on the 2035 target, agricultural emissions would need to drop. The [proposed](#) increase of the ESR target (by 11 percentage points) to a collective 40 % emissions reduction by 2030, in combination with CAP policies for sustainability, would be a start in supporting the achievement of such an emissions drop.

Objective 2: A fair, flexible and integrated framework

Member States³ have different starting points to consider, including economic factors, latitude and topography, when asked to either increase removals or decrease agricultural emissions. The Commission's annual removal targets will take this into account and will continue to provide **flexibility mechanisms such as inter-Member State trading**. Details are given in paragraphs 5 and 6 of the amended Article 12; another amendment in this article stipulates that Member States will no longer be able to bank surplus removals from the first period. **A land-use flexibility mechanism** to address natural disturbances impacts is set up, with a percentage of the expected surplus removals at the end of 2025 also being mentioned. This mechanism, as outlined in the inserted Article 13b, seeks to reduce uncertainties, allowing allocations to Member States experiencing unexpected decreases of removals related to natural disturbances.

An integrated land sector framework could, according to the impact assessment, optimise land-use planning and better exploit the potential of cost-efficient carbon sequestration. Article 9 on **carbon storage products** seeks to incentivise mitigation action at the level of the land manager. Delegated acts are envisaged in order to expand the categories of carbon storage products as listed in Annex V, in line with the IPCC guidelines.

The Commission proposal highlights the importance of creating a level playing field and promoting results-based payments by establishing a carbon removal certification mechanism as well as advancing the [carbon farming initiative](#). The Commission's [work programme 2022](#) includes a legislative proposal on carbon removal certification scheduled for the fourth quarter.

Objective 3: Simplification

The current regulation includes complex accounting procedures requiring a certain capacity level, datasets and ensuing high regulatory costs. The change to a net target for 2030 allows **moving away from the various benchmark accounting procedures** and integrating emissions and removals within the sector into the GHG inventories, following the example of other sectors. An amended Article 8 provides that the use of the forest-reference-level approach is limited to the first period towards 2025. Article 13(c) on governance of the targets determines the measure to be taken if a Member State falls short of its national target in the second period (2026-2030).

Further to this, the LULUCF proposal envisages revisions to the Governance Regulation [2018/1999](#). What follows is a brief outline of the revisions to this regulation. Article 4 is updated to mention not only commitments but also the national targets under the LULUCF Regulation and the goal of a climate-neutral land sector in 2035. Article 2 is updated to include a definition of geographical information systems and geo-spatial application. Finally, the 2025 inventory review procedure allowing the Commission to adopt implementing acts, determining the binding national emissions and removals per Member State is set out in the amended Article 38.

Use of advanced remote sensing

The use of advanced remote sensing, such as the [Copernicus](#) programme, could help facilitate Member States' GHG reporting and provide monitoring of progress as well as supporting decision-making on mitigation actions.

The Commission envisages significant support to be provided by the European Environment Agency (EEA) on reporting, monitoring and verification.

The 'fit for 55' proposals are deeply intertwined, the aim being to deliver a coherent legislative framework for the 2030 climate targets and set the foundation for the ensuing period. As an example, revised sustainability criteria for energy biomass are included in the revision of the [Renewable Energy Directive II](#) (REDII). The LULUCF proposal makes links to other European Green Deal key initiatives related to the revision exercise, such as the recent [EU forest strategy](#), the ['farm to fork' strategy](#) and the [EU biodiversity strategy](#).

Advisory committees

The Commission for the Environment, Climate Change and Energy (ENVE) of the European Committee of the Regions (CoR) debated the 'fit for 55' package at its meeting on 9 September 2021. Åsa Ågren Wikström (EPP, Sweden) was appointed rapporteur. The CoR adopted its [opinion](#) at its 146th plenary session at the end of April 2022. The opinion raises arguments against merging non-CO₂ emissions from agriculture with LULUCF from 2031, and further points to risks in excessive flexibilities while suggesting territorial impact assessment to take account of differences in impacts among regions and types of stakeholders, such as farmers or foresters.

A [study group](#) within the European Economic and Social Committee (EESC), with Anastasis Yiapanis (Diversity Europe - Group III, Cyprus) as rapporteur, worked on the LULUCF proposal; the EESC [opinion](#) was adopted on 8 December 2021. The EESC calls for national legislative frameworks to

incentivise sustainable business models and practices, further ensuring training initiatives and promoting new practices along with financial support for these. The EESC points to the need for global action and, finally, calls for the inclusion of wetland emissions as soon as possible.

National parliaments

The period for national parliaments to raise concerns over subsidiarity concluded on 8 November 2021. Eleven Member States commenced scrutiny; three of them made remarks on the file in [IPEX](#). [Ireland](#) finds that several of the 'fit for 55' package proposals, including the LULUCF revision, do not comply with the principle of subsidiarity. For instance, it points to the proposal's inadequacy in meeting the procedural requirements, specifically regarding the provision of detailed indicators as would justify the need for action at EU level. On the contrary, [Spain](#) considers that there is compliance with the subsidiarity principle. The [French](#) Senate upholds that granting the Commission the power to adopt, in 2025, implementing acts setting Member States' annual emissions and removals targets towards 2030, is a prerequisite for reaching climate neutrality. Its Working Group on subsidiarity of the European Affairs Committee will further [examine](#) the proposal.

Stakeholder views⁴

In the July [Eurobarometer](#) on climate action, 90 % of respondents agreed with the goal to make the EU climate neutral by 2050. The LULUCF public consultation, ahead of the proposal, received 235 responses. Answering the questionnaire, a majority (52 %) would like to see the LULUCF sector contribute towards the climate targets beyond the current 'no-debit' rule. In addition, 66 % believe that an improved monitoring, reporting and verification framework is important and 56 % support the use of satellite imagery in this regard. As regards combining agriculture non-CO₂ and LULUCF emissions into a new pillar, the respondents' feedback to the questionnaire is not clear, though the majority support legally binding national targets in such a pillar.

Views diverge when it comes to approaches to carbon storage and removals. While the bio-based sector favours active forest management and removals credited in harvested wood products, environmental NGOs remain critical of this approach, favouring preservation of existing natural sinks. In a [joint statement](#) on the draft forest strategy, 14 EU forest and forest-based sector associations ask the Commission to ensure consideration of the integrated value chains within forestry, including those related to maintaining healthy and resilient forests, and not focus solely on long-lived wood products. Echoing this, the [paper on the RED II revision file](#), drafted by seven of the 14 associations, calls for the biomass cascading principle to take into account local social circumstances and avoid placing too rigid a focus on sustainability, pointing also to subsidiarity concerns in the Commission's approach. The seven organisations linked to the bioenergy value chain further criticised the lack of regulatory clarity resulting from a new revision process ahead of the full transposition of the 2018 directive.

NGOs including [Fern](#), [WWF](#) and [CAN Europe](#) say the Commission is not going far enough to reverse the bioeconomy incentives in RED, failing to protect carbon sinks and ultimately risking the climate-neutrality target for 2050. They call for increased removals targets of 600 MtCO₂e in 2030 and avoiding flexibilities, separating removals and reductions, as emission reductions are generally more permanent, whereas LULUCF related removals risk reversal due to natural disturbances or change in practices. Fern also [criticise](#) the lobbying approach of industry.

The eight-week feedback period for the Commission's adopted proposal ended on 8 November 2021. All documents are available on the LULUCF revision page on '[Have your say](#)'.

Academic views

A 2019 [analysis](#) of the existing LULUCF Regulation by the German Öko-Institut pointed to the lack of safeguards for biodiversity or old-growth forest protection, or incentives for long-term mitigation planning in the sector. In 2020, researchers at the institute [identified](#) a lack of accuracy and

completeness in current reporting practices, arguing the need for improved data sources. Furthermore, they argued that a lack of detail in reporting limits the visibility of effects of different management practices, and thus discourages mitigation action in Member States. A 2021 [article](#) in *Nature Climate Change* also notes significant differences between countries' assessment of land-use mitigation prospects in GHG inventories, compared to results from global assessment models.

A 2020 [article](#) in *Nature*, using satellite data to compare harvested forest areas in Europe, suggests a 49 % harvest increase in 2016-2018 compared to 2011-2015. The 2021 [study](#) from the Joint Research Centre on woody biomass for energy confirms inconsistencies in the data on sources and uses, while also noting an increasing trend in woody biomass use.

Experts discussed the LULUCF revision with policy-makers during a Committee on Environment, Public Health and Food Safety (ENVI) [workshop](#) in May 2021. The workshop [proceedings](#) provide a full account of the event, including the agenda of the discussion and the main points raised by the experts. Among the key takeaway messages were: the need for simpler accounting and more accurate monitoring; recommendations to set a future target for removals based on potential; and the need to deliver an appropriate regulatory framework while carefully considering the trade-offs between the long-term priorities for carbon sinks and biodiversity with bio-based industries' short-term need for resources. Revenue-generating incentives were mentioned as avenues for reducing the opportunity costs of mitigation efforts for landowners. However, some participants insisted that adopting a more holistic approach to healthy soils would increase the overall value of efforts from an ecosystem services perspective. Others pointed out the risk that forest harvesting could shift to locations outside the EU, if limits are put on EU harvest rates.

Legislative process

The proposal was sent to the co-legislators on 14 July 2021. In the European Parliament, the ENVI committee was assigned the [file](#), with Ville Niinistö (Greens/EFA, Finland) appointed as rapporteur. On 17 December 2021 the draft report was published, and opened for Members' proposed amendments. The committee adopted its [report](#) on 17 May 2022 and submitted it for a vote in the June I 2022 plenary session, where it was adopted with minor amendments, see further below.

The committee report does not support the Commission's proposal to merge, from 2030, non-CO₂ emissions from agriculture with LULUCF into a new land pillar for climate action. MEPs have expressed concern, also noted in the draft report, that this could negatively impact efforts, within the agricultural sector, to ensure direct emission reductions. During the committee process the appropriate 2030 target for carbon removals from LULUCF received a lot of attention. In the end, the report supports the target of 310 MtCO₂e from LULUCF, yet proposes an additional target of 50 MtCO₂e to come from voluntary carbon farming initiatives. To this end the report asks the Commission to provide an overview of available funds and measures to support such initiatives down to farm level, including training and re/up-skilling. The legislative proposal on a carbon removal certification scheme announced in the Commission's 2022 work programme, is built into the text so as to become a legally required delivery from the Commission, to further support delivery of the targets. The Commission should, by the end of 2024, put forward a progress report on LULUCF net-removals increase and agricultural emissions decrease, assessing whether the trajectories, taking into consideration national climate and energy plans, are in line with the EU Climate Law commitments. The report would make recommendations for national-level targets and sub-targets for both sectors, ensuring policy coherence, and, if appropriate, the Commission should put forward legislative proposals to secure contributions from all sectors.

By 2025, the regulation should be amended to include five-yearly LULUCF targets from 2035 to 2050. In the 2026-2029 period, to ensure delivery of the 2030 LULUCF target, the Commission should, at both EU and Member State level, set annual binding LULUCF net-GHG removals targets and sub-targets for net-GHG emissions from the cropland, grassland and wetland categories. Non-compliance at national level would result in a penalty on the following year's target.

Consecutive non-compliance would trigger recommendations for action from the Commission, and the Member State concerned would have to revise its national energy and climate plan and long-term strategy within six months of receiving them. An assessment following the global stocktake is expected to result in expansion of the scope, in the post-2030 period, to cover coastal, marine and freshwater ecosystems and the coastal ecosystem.

When it comes to trading surplus removal credits between Member States, ENVI proposes to set a minimum price for such credits at the average cost of ETS allowances for the specific transfer year.

The report proposes to rename the proposed 2026-2030 land use flexibility mechanism as a 'natural disturbances mechanism'. Support allocations could be made following natural disturbances, including ecosystem perturbations due to climate change, providing the Member State could show that adequate adaptation measures were taken in advance to prevent such impacts.

The committee adopted the Commission's proposed reporting simplification towards emissions and removals accounting in accordance with IPCC guidelines. Tier-based reporting requirements (see box) were however increased from 2026 with ENVI proposing to add Tier 3 requirements for land use units under high future climate risks, units under protection or restoration, and high carbon stock units. The Commission proposed that for the 2021-2025 period, Tier 1 would apply, with Tier 2 for some categories and that from 2026, Tier 2 would apply to all reporting categories. The Committee report argues that an enhanced monitoring and reporting system is essential to ensure the resilience of nature-based carbon removals and delivery across a range of policies.

Tier levels in IPCC GHG reporting guidelines

Reporting of greenhouse gases under LULUCF would follow the [IPCC guidelines](#). These include three tiers of increasing complexity for categorising both emissions factors and activity data.

Tier 1 often utilises IPCC-recommended country-level defaults, while Tiers 2 and 3 require more data and are considered more accurate. While Tier 2 uses country-specific data, Tier 3 would normally require more advanced datasets and monitoring.

The ENVI committee report puts a general focus on ensuring policy coherence, in particular with the Commission's 2020 communication on an EU biodiversity strategy for 2030 ([COM\(2020\) 380 final](#)), its 2018 bioeconomy strategy ([COM\(2018\) 673 final](#)) and its 2021 EU soil strategy ([COM\(2021\) 699 final](#)). Compliance reports are to include assessments of trade-offs and synergies when it comes to action in biodiversity rich areas or others areas concerned by the above strategies. Furthermore, the report stresses the need to use advanced monitoring tools such as Copernicus satellites and soil samples to assess carbon sequestration in soils. The report further proposes to give the Commission the power to adopt delegated acts to amend the Governance Regulation (EU) 2018/1999, adding new land categories to the land use units for protection or those for restoration, to fulfil commitments under the biodiversity strategy and new EU forest strategy for 2030 ([COM\(2021\) 572 final](#)), and under the expected regulatory framework on nature restoration. The report asks Member States to take into account the 'do not significant harm' principle and the pillar of social rights in their planning.

For the proposed revisions of Article 9 on carbon storage products, the report specifies that these must be sustainable and science-based with high environmental integrity. Whereas the Commission proposed it should have the power to adopt delegated acts to expand categories of carbon storage products including HWP, in Annex V, MEPs chose to change this back to only HWP categories, limiting the scope of the possible additions. For carbon storage products, the Commission should submit an assessment report only after the entry into force of the framework for certification of carbon removals and update of IPCC guidelines. The assessment report should consider benefits and trade-offs from a range of perspectives, including but not limited to; harvesting levels, biodiversity concerns, farm level impacts and overall environmental integrity from the inclusion of sustainably sourced long-lived bio-based carbon storage products. The report could be accompanied by a legislative proposal to amend the regulation.

The Parliament [adopted](#) its position, largely following the committee report, during the June I 2022 plenary session, with 472 votes in favour, 124 against and 22 abstentions. However, the Parliament decided to remove the additional target of 50 MtCO₂e to come from voluntary carbon farming initiatives, inserting instead that 'additional measures and initiatives at Union level to support carbon farming' shall 'amplify' the LULUCF removal target. Such measures and initiatives, including methodologies, would supplement the Regulation from one year after its entry into force. Plenary also took out the proposal in the ENVI report to assign sub-targets and related methodologies, for specific types of land categories. Finally, rules on specific aspects of sustainable forest management to increase CO₂ uptake from the atmosphere were removed from the ENVI report in plenary.

The file was referred back to the ENVI committee with a mandate for trilogue negotiations.

The Council had an initial informal exchange on the 'fit for 55' package at the end of July 2021 and a [formal debate](#) on 6 October 2021. An [overview](#) of progress made on 'fit for 55' files in various formations within the Council was released on 22 November 2021. On LULUCF, the progress report pointed to the need for further technical work. In January 2022, environment and energy ministers held a joint working session on the file. The Council Working Party on the Environment had examined the proposal over the course of four meetings during the autumn of 2021. As of March 2022, delegations had, according to the [presidency note](#), expressed support for the 310 Mt CO₂e removal target for 2030. In April 2022, agriculture ministers [discussed](#) the LULUCF proposal and expressed overall support, with concerns raised on topics such as impacts of natural disturbances and post-2030 LULUCF credit transfers, as included in the [effort-sharing proposal](#).

At the [meeting](#) of 28 June 2022, the Environment Council adopted a [general approach](#), in which ministers give support to the 310 Mt CO₂e removal target as well as national binding targets for the 2026-2030 period. The Council's general approach however states that the national targets should be for the period as a whole, rather than intermediate annual targets as proposed by the Commission. A 2026-2030 LULUCF emissions/removals budget with indicative annual values would help guide Member States' progress. Specific details and considerations were added regarding the flexibility mechanism for natural disturbances, adding the need to take account of long-term and more diffuse impacts of climate change such as desertification over time, particularly related to Member States with a high proportion of organic soils, where such processes, in combination with legacy land management practices, may result in an increase of land-use emissions.

The Parliament and the Council reached a [provisional political agreement](#) on 11 November 2022. The [agreed text](#) follows the Commission's proposed 2030 target to deliver net 310 Mt CO₂e removals by 2030 from the LULUCF sector. There is no mention of 'at least' in relation to the 2030 target, which was included in the Parliament's negotiating position from June 2022, nor has the Parliament's encouragement to Member States to overachieve stayed in Article 4, but it can be found in the recitals. Considering the [225Mt CO₂e limit](#) set in the EU Climate Law on the role of removals in delivering the 2030 target of a 55 % net emissions reduction, the now-agreed LULUCF target will deliver a net reduction in emissions of 57 % by 2030.

The 'no-debit' approach will continue to apply for the period until 2025, after which each Member State will have a nationally binding 2030 target for removals and emissions from LULUCF. The nationally binding 2030 targets have not been adjusted from the Commission's proposal, though [Annex IIa](#) has had [columns added](#) to show the increase in effort based on each country's 2016/2017/2018 average LULUCF removals or emissions baseline. A linear trajectory will be drawn up for each Member State, starting in 2022 and ending with the nationally binding 2030 LULUCF target. The starting point will be the average of a Member State's reported GHG inventory data for the years 2021, 2022 and 2023, as recorded in 2025. The final agreement replaces the binding annual targets proposed by the Commission with a four-year budget for 2026-2029, as per Article 4, paragraph 4. If Member States record a deficit compared to the trajectory set for them during that period, they must compensate for it by achieving a surplus within the same period. The annual limit values will be adopted by the Commission through implementing acts (Article 4.5).

When evaluating compliance with the budget and delivery of the 2030 target after the second period, the reported GHG inventory data (as per the data available in the ghg inventory in 2032) for the years 2021, 2022 and 2023 will be used to take into account Member States' technical adjustments. The Commission will be able to intervene if any specific technical adjustments would prevent the EU from delivering on the agreed 2030 target.

Flexibilities are kept between LULUCF and the ESR, allowing Member States to sell or purchase removal credits. The revenue from such transactions should be used for climate action, and Member States must inform the Commission of such expenditure. The agreement has amended the text regarding use of revenue from the Parliament's proposed 'shall', indicating an obligation, to 'should', indicating encouragement to spend revenues on climate action. The Parliament's proposal to set a minimum price equal to the average closing price of emission allowances in the EU ETS in the same year has not been agreed to in the negotiations.

Article 10 retains the natural disturbances mechanism, while more details and requirements to receive compensation on the basis of natural disturbances are added under Article 13 on flexibilities.

In the event that a Member State falls below the national target for the second period, as proposed by the Commission, the discrepancy will be multiplied by 1.08 and added to the country's 2030 target. The agreed text adds further provisions to strengthen implementation; Article 13d of the text adds a range of corrective actions required from Member States if the annual assessment under [Article 29](#) of the Governance Regulation shows insufficient progress towards the 2030 target.

IPCC Tier level 3 reporting for land units with high climate risks, as proposed by the Parliament, is kept. Member States will be required to assess biodiversity and other environmental trade-offs and how they have taken into account the 'do no significant harm' principle in their measures and policies under compliance reporting (Article 14a and 14b).

The review of the LULUCF Regulation following the first global stocktake is maintained. The Commission must submit a report within six months of the conclusion of the global stocktake which must encompass several aspects, including the possible extension of the scope to cover non-CO₂ GHG emissions from agriculture and the setting of post-2030 targets for the land-use sector.

For the inclusion of sustainably sourced, long-lived carbon storage products that have a net-positive carbon sequestration effect, the Commission must submit a report – also considering environmental trade-offs, particularly for biodiversity – within 12 months of the entry into force of the proposed Union certification framework for carbon removals ([COM\(2022\) 0672](#)).

The text was endorsed by Coreper on 21 December 2022 and then by the ENVI committee on 16 January 2023. It now needs to be formally adopted by the Parliament in plenary and the Council before publication in the Official Journal.

EUROPEAN PARLIAMENT SUPPORTING ANALYSIS

[2030 climate target plan: review of Land Use, Land Use Change and Forestry \(LULUCF\) Regulation](#) (ENVI workshop proceedings), Policy Department for Economic, Scientific and Quality of Life Policies, European Parliament, June 2021.

Erbach G., [European Climate Law](#), EPRS, European Parliament, September 2021.

Erbach G., [EU climate action policy: Responding to the global emergency](#), EPRS, European Parliament, March 2021.

Jensen L., [EU climate target plan: Raising the level of ambition for 2030](#), EPRS, European Parliament, December 2020.

Vikolainen V., ['Fit for 55' package: Revising the Regulation on land use, land-use change and forestry \(LULUCF\)](#), EPRS, European Parliament, February 2022.

Vikolainen V., [Setting the 2030 GHG emissions reduction target](#), Initial Appraisal of a European Commission Impact Assessment, EPRS, European Parliament, December 2020.

OTHER SOURCES

[Greenhouse gas emissions and removals from land use, land use change and forestry \(LULUCF\). 'Fit for 55 package'](#), Legislative Observatory (OEIL), European Parliament.

[Background Paper: 2030 Climate Target: Review of LULUCF Regulation](#), Öko-institut e.V, May 2021.

ENDNOTES

- ¹ The FRL is based on observed management practices in the 2000-2009 baseline period and forest age-dynamics, but contrary to Kyoto Protocol approaches, the regulation excludes policy assumptions, to avoid inflating expectations.
- ² The majority of emissions resulting from agriculture are methane (CH₄) and nitrous oxide (N₂O) resulting from livestock and manure management, fertilisation, rice cultivation or burning activities. The LULUCF land categories 'cropland' and 'grassland' already include the agricultural CO₂ emissions or removals linked to those land uses.
- ³ Finnish flexibility (Article 13a): For the 2021-2025 period, Finland is offered an additional compensation of 5 Mt CO₂e accounted emissions across certain categories, provided that the Finnish [long-term strategy](#) includes forest sinks and reservoir conservation and enhancement measures and that EU total emissions from land categories in Article 2(1) do not exceed removals in the 2021-2025 period. Certain limitations would apply as set out in Article 13a(2). This special allowance was built into the current regulation (10Mt CO₂e over 2021-2030) to specifically address calculation [issues](#) for Finland in the LULUCF Regulation.
- ⁴ This section aims to provide a flavour of the debate and is not intended to be an exhaustive account of all different views on the proposal. Additional information can be found in related publications listed under 'European Parliament supporting analysis'.

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